

Effective Professional Development for Teachers in Rural Pakistan: Perceptions of Key Stakeholders

by

Ali Nawab

Thesis
Submitted to Flinders University
For the Degree of

Doctor of Philosophy

College of Education, Psychology and Social Work

July 2018

TABLE OF CONTENTS

Table of Contents	i
Figures	vii
Tables	viii
list of abbreviations and glossary of terms	ix
Abstract	xii
Declaration	xiii
Acknowledgements	xv
1. Introduction	1
1.1 Background	1
1.2 Education in Pakistan: A Brief Background	3
1.3 Teacher Education in Pakistan	6
1.3.1 Pre-service Training Programmes in Pakistan	7
1.3.2 In-service PD Programmes in Pakistan	8
1.4 Rationale for this Research	10
1.5 Purpose of the Study	11
1.6 Research Question	11
1.6.1 Sub-Questions	11
1.7 Significance of the Research	12
1.8 Research Approach	13
1.9 Focus of this Research	13
1.10 Organisation of the Thesis	13
1.11 Conclusion	15
2. Literature Review	16
2.1 Introduction	16
2.2 Teacher Professional Knowledge	17
2.3 Meaning of Professional Development	18
2.4 Adult Learning Theories	20

	2.4.1 Self-directed Learning	20
	2.4.2 Experiential Learning	21
	2.4.3 Learning as Reflective Process	21
	2.4.4 Transformative Learning	22
	2.4.5 Situative Perspectives	23
	2.5 Models and Trends in PD	24
	2.5.1 'Transmissive' or Traditional Models	25
	2.5.2 Reform or Innovative Models of PD	27
	2.6 Synthesis of PD Models	29
	2.7 Characteristics of Effective Professional Development	31
	2.7.1 Content Focus	32
	2.7.2 Active Learning	33
	2.7.3 Extended Duration	33
	2.7.4 Coherence	34
	2.7.5 Collective Participation	34
	2.8 Lack of Evidence to Support Consensus	. 35
	2.9 Influence of Context in PD	36
	2.10 Aligning PD with Real Needs of Teachers	38
	2.11 Conceptual Framework	40
	2.12 Conclusion	42
3	Methodology	44
	3.1 Introduction	44
	3.2 Research Design	44
	3.4 Epistemological Paradigm: Constructivist-Interpretive	44
	3.5 Research Approach: Qualitative	46
	3.6 Case Study Method	47
	3.7 Research Framework: Constructivist Grounded Theory	48
	3.8 Setting: District Chitral	50
	3.9 Research Participants	. 52

	3.10 Data Generation Tools and Procedures	53
	3.10.1 Interviews	54
	3.10.2 Questionnaire	57
	3.10.3 Documents	58
	3.11 Data Analysis Procedures	59
	3.12 Trustworthiness in the Research	63
	3.12.1 Adequate Sampling	63
	3.12.2 Mock and Pilot Interviews	63
	3.12.3 Triangulation	64
	3.12.4 Prolonged Engagement	64
	3.12.5 Peer Debriefing and Member Checking	64
	3.12.6 Memo Writing	64
	3.12.7 Minimizing Subjectivity	65
	3.13 Ethical Considerations	66
	3.14 Structure for Reporting the Findings	67
	3.15 Conclusion	69
4.	STAKEHOLDERS' PERCEPTIONS AND EXPERIENCES OF PD	70
	4.1 Introduction	70
	4.2 Perceived Meanings, Purposes and Outcomes of PD	70
	4.2.1 Meaning of PD for Stakeholders	71
	4.2.2 Purposes of PD for Stakeholders	75
	4.2.3 Outcomes of PD for Stakeholders	77
	4.3 Features of Effective PD for the Stakeholders	80
	4.3.1 Relevance of PD to Teachers' Needs	80
	4.3.2 Content and Pedagogy Focused PD	85
	4.3.3 Engaging Teachers in Active Learning Experiences	89
	4.3.4 Sustained PD	93
	4.3.5 Regular Follow-up Support	98
	4.4 Canalysian	101

5	•	Contextual Factors Influencing PD of Teachers	103
	5.	1 Introduction	103
	5.	2 Coordination among Stakeholders Influencing Quality of PD	104
	5.	3 System Related Factors Influencing PD	108
		5.3.1 Monitoring	108
		5.3.2 Accountability, Recognition and Reward	109
	5.	4 School Leadership Influencing PD of Teachers	112
	5.	5 Teacher Attitude Determining Their Engagement in PD	117
	5.	6 Impact of Resources on Availability and Quality of PD	123
	5.	7 Conclusion	126
6		Discussion of Findings	128
	6.	1 Introduction	128
	6.	2 Features of Effective PD	128
		6.2.1 Core Features of Effective PD for Stakeholders	129
		6.2.2 Relating the Core Features with Recent Literature	129
		6.2.3 Features of PD Influenced by Experiences	131
		6.2.4 Context Determines Features	132
	6.	3 Existing PD programmes Vis-à-vis Features	134
		6.3.1 Examples of Effective PD	134
		6.3.2 Issues with the Majority of Existing PD	135
		6.3.3 Features of PD are Interdependent	136
		6.3.4 Lack of Follow-up Support	137
	6.	4 Contextual Factors Influencing PD	138
		6.4.1 Dependency on the External Sources	138
		6.4.2 System Related Factors	139
	6.	5 Influence of the Contextual Factors on PD of Teachers	143
	6.	6 PD: A Complex Process	144
	6.	7 Conclusion	145
7		Moving Forward	147

	7.1 Introduction	. 147
	7.2 Initiatives Required at the System Level	. 148
	7.2.1 Agreed Standards for Teachers and Outcomes for PD	. 148
	7.2.2 Valuing and Rewarding PD	. 150
	7.2.3 The Role of School Leadership	. 151
	7.2.4 Resourcing PD	. 151
	7.3 PD providers	. 152
	7.3.1 Engaging the Views of Stakeholders	. 153
	7.3.2 Coordination with Education Department and Schools	. 154
	7.3.3 Shifting to Innovative Models of PD	. 155
	7.3.4 Capacity Building of School Leadership	. 156
	7.4 Conclusion	. 158
8	. Conclusion	. 159
	8.1 Introduction	. 159
	8.2 Effective PD for Teachers in Rural Pakistan	. 159
	8.3 Contribution of the Research	. 163
	8.4 Using Grounded Theory	. 164
	8.5 Cultural and Social Aspects	. 165
	8.6 Limitations of this Research	. 166
	8.7 Future Research	. 167
A	ppendices	. 170
	Appendix A: Map of Pakistan	. 170
	Appendix B: Interview Guide for Teachers	. 171
	Appendix C: Questionnaire	. 172
	Appendix D: Sample of Evaluation Form Filled in by a Participant	. 173
	Appendix E: Example of Quantitative Data Recoding from Evaluation Form	. 174
	Appendix F: Example of Qualitative Data from Evaluation Forms	. 175
	Appendix G: Developing Quantitative Part of Evaluation Forms into Graphs	. 176
	Appendix H: An Example of Source Memo	. 177

Appendix I: Purposes of PD Noted by the Respondents	178
Appendix J: Outcome of PD Noted by the Respondents	181
Appendix K: National Professional Standards for Teachers	184
References	185

FIGURES

Figure 2.1 Framework for literature review	16
Figure 2.2 Spectrum of CPD models, adopted from Kennedy, 2014	25
Figure 2.3 Participation rates by type of PD activity (2007-08), international averages	30
Figure 2.4 Conceptual framework adopted from Desimone (2009)	41
Figure 3.1 Representation of the Case Study Method Used in this Research	47
Figure 3.2 Population of age group 5-10 and gross enrolment	50
Figure 3.3 Raising codes and categories to abstract level	62
Figure 3.4 Framework used for presentation of findings	68
Figure 4.1 Representing the focus of Chapter Four	70
Figure 4.2 Stakeholders' Views on PD	75
Figure 4.3 Active learning activities as perceived and experienced by participants	90
Figure 5.1 Representing the focus of the third chapter of findings	103
Figure 5.2 Contextual factors influencing PD of teachers	103
Figure 5.3 An approach to coordination envisaged by stakeholder	107
Figure 5.4 Factors influencing quality of PD and teachers' engagement in PD	127
Figure 6.1 Features and context determining effective PD	128
Figure 6.2 Features of effective PD influencing one another	136
Figure 6.3 Contextual factors impacting PD of teachers	138
Figure 6.4 Contextual factors influencing one another	143
Figure 6.5 Layers and actors impacting effective PD	144
Figure 7.1 Suggested model of change for effective PD	147

TABLES

Table 1.1 Provincial Training Institutes and their supervising bodies in Pakistan	6
Table 3.1 Detail of Public Schools and Teachers in District Chitral	51
Table 3.2 Categories of the Research Participants	52
Table 3.3 Number of focus groups in different categories	55
Table 3.4 Types of focus groups interviewed	55
Table 3.5 Reporting terms adopted from Prairie Research Associates (n.d.)	69
Table 4.1 Meaning of PD for stakeholders	71
Table 4.2 Purposes of PD and number of respondents	76
Table 4.3 Perceived outcomes of PD with number of respondents	78
Table 5.1 PD programmes offered at the Mountain Institute in the years 2012 and	2014 124
Table 6.1. Core features of effective PD for stakeholders	129
Table 6.2 Comparison of features proposed by the stakeholders and Desimone \dots	130
Table 6.3 Four categories of the core features of effective PD	130
Table 6.4 Western literature on the role of school leadership in PD of teachers	141
Table 7.1 List of the recommendations for the System and PD Providers	157

LIST OF ABBREVIATIONS AND GLOSSARY OF TERMS

ACR	Annual Confidential Report	A tool for assessing the performance of teachers in the public schools in Pakistan.
ADE	Advance Diploma in Education	A two-year initial teacher education programme recently introduced in Pakistan to replace CT and PTC.
ADEO	Assistant District Education Officer	Working under the supervision of DDEO, ADEOs are responsible for planning and development, human resource management, teacher professional development, school inspection and supervision and community participation in education.
AFAQ	Association for Academic Quality	An independent organisation working on textbooks publications, teacher training, student assessment and career counselling in Pakistan and several other countries.
AIOU	Allama Iqbal Open University	A distance learning public university in Pakistan known to be the world's fourth largest institution of higher learning with regard to the enrolment.
AKES	Aga Khan Education Service	AKES is one of four agencies of the Aga Khan Development Network supporting activities in the field of education.
AKU	Aga Khan University	An independent university founded by the Prince Aga Khan IV with its primary campus in Karachi Pakistan, ranked among the top 185 universities in Asia and as the top medical school in Pakistan.

BISE	Board of Intermediate and Secondary Education	A board that administers a national examination for students at the end of grade 10 and grade 12.
CPD	Continuing Professional Development	The intended and unintended learning experiences a teacher avails after joining the teaching profession.
СТ	Certificate in Teaching	An Initial teacher education certificate required to teach at middle and secondary level in Pakistan.
DDEO	Deputy District Education Officer	Next in hierarchy to DEO at the district level, DDEO assists the DEO in financial resource management, human resource management, office management, planning and development, professional development and school inspection.
DEO	District Education Officer	DEO is the principal officer at the district level, responsible for financial resource management, human resource management, office management, planning and development, school inspection and community involvement in education.
ECE	Early Childhood Education	ECE refers to the formal and informal teaching of young children till the age of about eight.
NGOs	Non-Governmental Organisations	National or international organisations generally non-profit and independent of specific governments.
NTS	National Testing Service	A testing service in Pakistan to assess the competency of candidates for admission, scholarship and recruitment purposes.

PD	Professional Development	All conscious and planned activities organised to enhance the capacity of teachers.
PL	Professional Learning	An approach to learning where instead of externally driven initiatives, teachers take responsibility for their ongoing self-development using a variety of teacher learning models especially in their work context.
PTC	Primary Teaching Certificate	An Initial teacher education certificate required to teach at elementary level in Pakistan.
SDEO	Sub-Divisional District Education Officer	SDEO is the head of education office at tehsil/sub-division level and responsible for managing primary schools in the sub-division including planning and development, financial management, human resource management, office management, teacher professional development, school inspection and community participation in education.
TNA	Training Need Assessment	A tool used by one of the PD provider organisations in the research region to assess the immediate needs of the teachers.

ABSTRACT

There is significant evidence that teachers have the greatest influence on student achievement. For this reason, Professional Development (PD) of teachers is increasingly becoming the focus of educational reform. In the remote region of Pakistan where the research was conducted, there is a recognition of the limitations of initial teacher education for preparing teachers to encounter the persistently changing demands of contemporary schooling. As a result, various donor agencies have been intervening to supplement government efforts to provide Continuing Professional Development (CPD) opportunities to teachers. However, little research has been done to understand whether these programmes meet the expectations of the relevant stakeholders. Where research exists in Pakistan, it has mainly been conducted in urban or semi-urban areas. PD programmes in rural Pakistan and the perspectives of relevant stakeholders in those regions thus far have been unattended. This research examines the perceptions of key stakeholders on PD programmes for teachers in rural Pakistan to understand what makes PD effective and valued for them with a view to generating guidelines to inform the design and delivery of high quality Professional Learning (PL) in Pakistan in general and in rural Pakistan in particular. To do so, the research uses a qualitative case study approach and constructivist paradigm with the assumption that knowledge is not a fixed entity to be transferred across contexts rather it is situated and can be constructed. As such, the research draws on the experiences of the key stakeholders including providers of PD, officials of education department, school principals and teachers. Three major research strategies, namely, focus group interviews, surveys and document analyses are used to generate data. Data are analysed using 'Constructionist' Grounded Theory (Charmaz, 2008) to generate data-informed theory. The research findings included that stakeholders value a PD programme that is relevant to teachers' immediate needs; focuses on both content and pedagogy; involves active learning experiences; extends over a long period and includes follow-up support. It is found that the majority of the PD programmes on offer for teachers lacked most of these features. The research outcomes also highlight the significance of the contextual factors (namely, those related to the system, school leaders and teachers) regarding their influence on the effectiveness of PD. Based on these findings, the research argues that the existing PD programmes offered for teachers in rural Pakistan are externally driven and less informed by the views, needs and experiences of stakeholders. Building on the views and experiences of the key stakeholders as well as informed by the recent trends in PD of teachers, this research develops a theory of effective PD for teachers in Pakistan in general and for rural Pakistan in particular.

DECLARATION

I certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signed:

Date: July 08, 2018

IN MEMORY OF AKBAR ALI, MUHAMMAD KHAN AND UMARA KHAN, MY ORGANISATIONAL FELLOWS AND RESEARCH PARTICIPANTS WHO PASSED AWAY IN A PLANE CRASH ON DECEMBER 7, 2016. ALTHOUGH YOU ARE NOT WITH US ANYMORE, AS PRINTED IN THIS THESIS, YOUR WORDS WILL ECHO FOREVER.

ACKNOWLEDGEMENTS

Although the following thesis is an individual work, I could never have explored the depths without the help, support, guidance and efforts of a lot of people whom I humbly present my gratitude.

First of all, I extend my modest gratitude to Australian Government for awarding me Research Training Programme Scholarship. This scholarship enabled me to achieve my vision of doing a PhD from an Australian University.

Secondly, I respectfully admit that this research could not have been successful without my Principal Supervisor Dr Kerry Bissaker and Co-Supervisor Dr Janice Orrell who consistently supported, encouraged, challenged and patiently guided me through the doctoral journey. Their challenging feedback developed me not only as a professional but also as a person. The research skills I learnt under their supervision would be my strength in my future career. Thank you.

I would also like to thank all my RHD colleagues of the Group Supervision, an innovative model of supervision organised by my supervisors. The sharing, presentations, discussions and feedback in the group supervision model broadened my understanding of a variety of education and research areas. I also extend my sincere thanks to all RHD students at the College of Education whose company was a source of learning for me.

My sincere thanks and gratitude go out to my research participants: teachers, school leaders, providers of professional development and officials from education department whose sharing of insights, knowledge and wisdom formed the basis of this research. Thank you for your constant cooperation, frankness, honesty and trust.

I would also like to thank Lynette Westley, the landlord in whose property I stayed throughout my doctoral studies here in Australia. I found her very caring and cooperative. She taught me cooking skill, the skill I was lacking in before coming to Australia. I also thank my friends at the Marion Bowling Club who not only provided me with a joyful company but also taught me bowling skills. I enjoyed playing lawn bowls during my stay in Australia.

Most importantly, I must extend my appreciation to my wife and children. Although being away from you was hard, your sacrifice and cooperation made me avail this great learning opportunity. Thank you.

1. INTRODUCTION

1.1 Background

Schools are facing increasing pressure to deliver high-quality service to educate and prepare students to engage with and contribute to a rapidly changing society. As society trends change and evolve, so do the educational standards expected of students. Today's students require complex analytical skills, problem solving capacities and high-order thinking (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009). The achievement of these complex skills becomes further challenging given the diverse background of students. Currently, students are accessing education in greater numbers, and these students are more diverse in their learning as well as their emotional and social backgrounds (Lohman, 2000).

This complex scenario generates significant challenges for teachers at a time of an increased expectation that teachers hold the key responsibility for raising standards for all students (Guskey, 2002). It has been argued that raising standards for all students can be achieved when teachers have deep content knowledge and use a variety of instructional strategies identified by research as effective (Good, 2014; Hattie, 2008). Many researchers contend that effective teaching is not an innate ability; rather it is closely linked with the preparation teacher receives (Fullan, 2007; A. Hargreaves, 2002). If effective teaching has been possible without preparation, the bright and eager graduates hired for Teach for America would have been successful (Darling-Hammond, 2000). As Darling-Hammond notes, the graduates hired for Teach for America were of the opinion that their lack of the knowledge required to teach was a hindrance in their success and that of their students. Similarly, Guskey (2002, p. 4) contends that "one constant finding in the research literature is that notable improvements in education almost never take place in the absence of professional development". Consequently, high-quality Professional Development (PD) has been the major focus of many reform initiatives to improve the standard of education (Dinham, 2007; Easton, 2008).

Teachers' capacity to be effective is generally expected to be developed initially through preservice training. However, teaching demands constantly change, so that a one-off pre-service training cannot prepare them for the rest of their career (UNESCO, 1996). The complex activity of teaching demands that teachers should continually develop and adapt to changing conditions and needs (Shulman, 1986). Therefore, Continuing Professional Development (CPD)¹ is reported as an effective method to develop capacity of teachers through connecting them to an

¹ In this introductory chapter, CPD is used to refer to those learning experiences which teachers avail after joining teaching profession. In the subsequent chapters, PD is used to refer to all natural and planned learning experiences and a justification for such use is presented on pages 18 to 19, Chapter Two.

emerging knowledge base (Nicolaidis & Mattheoudakis, 2008; Ramatlapana, 2009; Saiti & Saitis, 2006).

Although PD is well regarded for the teachers across the globe, certain factors make it relatively more significant for teachers in developing countries including rural² Pakistan. One factor is the poor quality of pre-service teacher education. The major issue with the initial teacher education in Pakistan is its outdated content and a strong emphasis on theory (Ali, 2011). Teachers attending these programmes gain few updated and practical ideas to implement in the classroom. Consequently, the very work of graduate teachers is questionable unless they have access to an ongoing development (Hussain & Ali, 2010).

Another factor which calls for urgent attention on PD of teachers especially in rural Pakistan is the low educational outcome of students in this region. Students in rural areas are reported to underperform academically compared with their counterparts in urban areas (South Asian Forum for Educational Development, 2014). Evidence suggests that compared with other variables such as poor infrastructure, the lack of quality teachers is the major factor in low achievement of students in the rural areas (Cheema, 2017). Whereas educational research stresses the importance of complex skills for today's students, the poor quality of teaching in rural Pakistan deprives the learners from developing those skills.

Against this background, many Non-Government Organisations (NGOs) have intervened in Pakistan including the rural areas to provide teachers with CPD opportunities aimed to shift their conventional practices to more innovative and child-centred pedagogies. Working in various capacities with several PD provider organisations in rural Pakistan, the researcher has experienced designing and implementing capacity building programmes for teachers and then observed the impact of those programmes. Both experience and studies, however, suggest that these PD opportunities have failed to significantly impact the practices of teachers (Nawab, 2017). One assumption in this regard is that the existing PD programmes focus on western generated theories without considering the contextual conditions. This is a general trend in developing countries, including rural Pakistan. The PD programmes have been designed based on the assumption held by PD providers that what works in the West, will work everywhere (McLaughlin, 1996). The key stakeholders in the region have no say in design and delivery of the existing PD. That which PD providers consider effective might not be relevant to the needs and realities of those stakeholders in the rural developing contexts.

² In Pakistan, no clear definition exists regarding what constitutes a rural area. However, the areas located far away from cities where people have limited employment opportunities, limited access to basic life facilities and who mainly depend on agriculture or on cattle are generally referred to as rural areas. District Chitral, the setting of this research, is also characterised by these features and thus defined as a rural area. More information on District Chitral is provided on page 50, Chapter Three.

A critical question which requires careful deliberation and research in this scenario is how to design and deliver PD programmes so that they will contribute to improved teaching practices and consequently, to enhanced student outcomes. The current research attempts to answer this question through focusing on the effectiveness and relevance of the existing PD programmes in remote rural Pakistan. It seeks to identify the changes needed to ensure that PD not only meets the needs of teachers and schools but also will have a positive impact on classroom practices ultimately leading to enhanced student outcomes. To do so, the research draws on the experiences and perception of key stakeholders, namely, teachers, school leaders, PD providers and education department officials to understand what makes PD effective and valued for these key stakeholders.

In the following sections, the education system in Pakistan in general and the teacher education in particular are briefly discussed to allow the readers to approach this thesis in an informed way. Then the research rationale, purpose, questions and significance are presented. The organisation of the thesis is provided at the end of the chapter.

1.2 Education in Pakistan: A Brief Background

Gaining independence from British rule, Pakistan came into existence on August 14, 1947. Situated on the western edge of South Asia, this country is divided into four provinces namely Sind, Punjab, Baluchistan and Khyber Pakhtunkhwa, and some federal units including the Islamabad Capital Territory, Federally Administered Tribal Areas and Northern Areas. Pakistan has a population of 195.40 million (Pakistan Bureau of Statistics, 2017), making it the world's sixth most populous country.

Before the 18th amendment to the constitution of Pakistan passed in 2010, the administration of public education in the country was partially centralised. The Federal Ministry of Education was responsible for the development of policies, national plans, budgets and overall curriculum development and standard of education. The 18th amendment to the constitution devolved power to the provinces giving them autonomy to decide on their curriculum, syllabus, planning, policy and standards of education (Dawn, 2010). Each province has a Ministry of Education headed by the Minister who has the overall responsibility for managing education in the respective province. The Ministry is supported by a Secretary, who is the administrative head of the Education Department. At the district level, policy implementation, supervision and monitoring of schools, and recruitment and transfers of teachers are the primary functions of the District Education Officer (DEO). DEOs are supported by a team of Deputy DEO, Sub Divisional Education Officers (SDEOs) and Assistant District Education Officers (ADEOs).

The formal school level education system in Pakistan is three-tier namely primary (grades 1 to 5) middle (grades 6 to 8) and secondary (grades 9 to 10). At the end of grade 10, students are required to qualify a national examination administered by a regional Board of Intermediate and Secondary Education (BISE)³. The types of schools in Pakistan are also divided into three streams namely the Public, Private and Madaris. The public sector is the largest service provider serving 27.69 million which makes 58% of students enrolled in schools (National Education Management Information System, 2017). The medium of instruction in public schools is Urdu⁴. Children mainly belonging to low-income families and residing in rural and semi-urban areas attend public schools. Although education in public schools is free, the shortage of teachers and lack of facilities result in public schools being characterised as having poor quality education (Ministry of Education, 2014).

Private schools enroll about one-third of school going children. The high-cost private schools mainly located in urban areas are attended by the children of upper-middle class families. However, private schools have gradually opened in rural areas, and enrolment of students in these schools is increasing mainly because they are regarded as having better quality education (Ministry of Education, 2014). The private schools largely in rural areas are staffed with female teachers who not only lack other options of employment but are also expected to work closer to their homes (Andrabi, Das, & Khwaja, 2008). Teachers in the private schools are paid roughly one-third to one-fifth of their public school counterparts. Evidence, however, suggests that the absence rate in private schools is not related to remuneration (Andrabi et al., 2008). Senior and highly paid teachers in public schools were found to be frequently absent from their classes in contrast to limited absences for novice teachers who are not as well remunerated.

The third stream of schools in Pakistan are Madaris (religious schools). Financed through charity and donations, these schools offer free religious education with boarding and lodging facilities. Statistics from Ministry of Education (2014) indicate there are 13,240 Madaris in Pakistan enrolling 1.79 million students (1.1 million boys and 0.66 million girls). Madaris are popular with Pakistani families, indeed "[m]illions of families, especially those with little money, send their children to religious schools, or madrassahs. Many of these schools are the only opportunity available for an education, but some have been used as incubators for violent extremism" (Kean, 2011, p. 369). Some authors contend that although some Madaris present a threat to worldwide peace, labelling all the madrasas as a home to extremism is an assessment predominantly propagated by the Western media (McClure, 2009). Given that some children lack any other

³ Some elite schools in Pakistan offer a programme called O-Level at secondary level that is equivalent to the UK General Certificate of Secondary Education (GSCE).

⁴ Urdu is the national language of Pakistan.

educational opportunities, especially due to their poverty, the Madaris are considered to be affording a basic educational right to millions of children.

When it comes to access and quality, Pakistan's education system aligns with the world's least effective (Barber, 2010; Hussain & Ali, 2010; G. R. Memon, 2007). A recent report from the National Education Management Information System (2017) suggests that the youth literacy rate in Pakistan is 72% and the rate for adults is 57%. Pakistan is home to 5.6 million out-of-school children of primary age, the second highest figure in the world after Nigeria (UNESCO, 2016). The global monitoring report of Education for All (UNESCO, 2015) reveals that Pakistan is far behind the Education for All (EFA) goals. The report shows that some other developing countries including Bangladesh, Rwanda, Nepal and Sudan are performing relatively better on meeting their goals than is Pakistan.

In Pakistan, significant differences have been identified between the public and private sector schools concerning the quality of teaching practices and student outcomes. In the public sector, mainly in rural primary schools, there is multi-grade situation where one teacher teaches two grades simultaneously housing them in one classroom. On the contrary, in the private schools mostly in urban areas, children have access to proper and quality Early Childhood Education (ECE)⁵ having separate classrooms for each grade, trained teachers and the required teaching learning aids (Ministry of Education, 2014). Studies have found that the outcome of students in the private schools is higher compared with the public schools resulting in increased preference for these schools even by families for whom private schooling is too costly (Alderman, Orazem, & Paterno, 2001). A report of UNESCO (2014, p. 32) reads that "a child in a low fee private school performs better than the average child in the top one-third of children in government schools".

Evidence also suggests that compared with urban areas, the quality of education in rural Pakistan is poor, leading to low attainment of students (Haq, 2017). The Annual Status of Education Report published by South Asian Forum for Educational Development (2014) reveals that in rural Pakistan, 65% of year 6 students could only read a year 2 level story in Urdu or their local language. Another report from UNESCO (2014) indicates that in Baluchistan, a less privileged province of Pakistan, only 45% of children in grade 5 were able to solve a two-digit subtraction, compared with 73% of children in the same grade in the wealthier Punjab province. The geographical disadvantage is further aggravated by gender. A recent report of UNESCO (2016) shows that 64% of males and only 14% of their female counterparts in poor rural areas

⁵ For early childhood education in Pakistan, different organisations have been using different terms and approaches, namely, Montessori, Releasing Confidence and Creativity (RCC), Early Childhood Education and Care (ECEC), Early Childhood Education and Development (ECED) and so on. In this research, Early

are literate. Based on the recent trends in Pakistan, the report portrays little change for marginalised groups predicting that boys from poverty backgrounds may not access a complete primary education until late 2050s; however, it may be the end of the century before girls coming from poor financial backgrounds achieve the same fundamental right.

One of the foremost causes of the poor performance is the extremely low investment in education (G. R. Memon, 2007). Pakistan spends only 2% of its GDP on education, the lowest in South Asia (Dawn, 2017). Some authors contend that politicians pay little attention to education "to gain and maintain positions of power and privilege" (Razzaq & Forde, 2014, p. 304). Inattention of the rulers and consequently, poor educational facilities have been instrumental in reduced quality of education in Pakistan. Many authors, however, attribute this to the poor quality of teaching resulting from the poor quality of teachers (Barber, 2010; Ministry of Education, 2014; Rizvi & Elliott, 2007). National Education Policy (Ministry of Education, 2009a), concedes that "the quality of teachers in the public sector is unsatisfactory. Poor quality of teachers in the system is owed to mutations in governance, an obsolete pre- service training structure and a less than adequate in-service training regime" (p. 43). The key prescription for improved quality of education recommended by the Government of Pakistan, Ministry of Education (2014) is vastly improved, qualified and trained teachers. In this situation, a review of the current approach to the qualification of teachers in Pakistan is an important starting point in understanding how improvements may be possible.

1.3 Teacher Education in Pakistan

In Pakistan, teacher education has been considered a provincial responsibility. All the four provinces have their own training institutes. The training institutes and their supervising bodies as presented in Table 1.1 below.

Table 1.1 Provincial Training Institutes and their supervising bodies in Pakistan

Province	Training Institute	Supervising Body
Sind	Government Elementary Colleges of Education	Bureau of Curriculum
Punjab	Government Colleges of Elementary Teachers	Directorate of Staff Development
Balochistan	Government Colleges for Elementary Education	Bureau of Curriculum
Khyber Pakhtunkhwa	Regional Institutes of Teacher Education	Directorate of Curriculum and Teacher Education

A recent report of National Education Management Information System (2017) indicates that currently, 209 teacher training institutions operate in the public sector offering a variety of preservice as well as in-service programmes. Moreover, a huge number of non-state actors such as

NGOs and civil society institutions supplement the government efforts mainly in the provision of in-service PD programmes. The following sections attend to the pre-service and in-service training programmes available to teacher community in Pakistan.

1.3.1 Pre-service Training Programmes in Pakistan

Although several generations of pre-service training have replaced each other in Pakistan, the Certificate in Teaching (CT) and Primary Teaching Certificate (PTC) programmes have been the dominant models of initial teacher education (USAID, 2010). The CT requires 12 years of education for admission and prepares teachers for teaching at middle and secondary levels. The PTC prepares teachers for primary level teaching and requires only ten years of education for entry, a requirement lower than Bangladesh where 12 years of schooling is required to be qualified for primary teaching (Basic Education and Policy Support, 2002). Both the CT and PTC programmes in Pakistan are of one-year duration.

The pre-service teacher education programmes in Pakistan have been criticised for their lack of quality and relevance (Ali, 2011; S. C. Khan, 2004; UNESCO, 2011). Ali (2011) observes minimal connections between the Initial Teacher Education Programmes and the demands of schools, more importantly, the children's learning needs. The curriculum is neither informed by recent advances in the field nor encourages creativity and problem-solving. Prospective teachers are mainly lectured about approaches to classroom teaching with no opportunities to apply their learning in practical activities (UNESCO, 2006). Although teaching practice is a compulsory part of pre-service programmes, "the supervision of teaching practice and guidance for the novice teacher is often brief and mostly just an initial in the lesson notebook by the supervisor, trainer or by a teacher in the practising school" (USAID, 2007, p. 9). Consequently, teachers attending these programmes see limited connection between their training and the teaching expectations from them (Siddiqui, 2007).

A recent shift has been introduced in the pre-service training of teachers funded and managed by USAID. The USAID Project called Pre-STEP (Pre-Service Teacher Education Programme) is a five-year plan to improve the quality of pre-service teacher education in Pakistan. Under this programme, replacing the traditional CT and PTC, USAID has introduced a four-year Bachelor of Education (B.Ed) and a two-year Associate Degree in Education (ADE) with an entry requirement of 12 years of schooling. Starting in 2011, the degree is being offered at around 16 teaching institutions in Pakistan including some universities, Regional Institute of Teacher Education and upgraded Government Colleges of Elementary Training.

The new programme is expected to implement changes including moving from traditional curriculum through to a greater focus on developing clarity around the relationship between theoretic awareness and educational practice (Behlol, Dad, & Raja, 2014). Although the first

cohort of ADE graduated in 2013, the graduates had not been placed in schools at the time of this research. Since no research has been conducted or published on the processes and outcomes of the newly introduced programmes, there is minimal knowledge on differences between the traditional existing programmes and the new ones. Of specific interest would be understanding if variations in the knowledge, skills and capacities of graduates of both programmes existed and if so how this influences outcomes for students. This will be important research to undertake to inform the Ministry of Education in Pakistan; however, it is beyond the scope of this research.

1.3.2 In-service PD Programmes in Pakistan

Documentation of the poor quality of pre-service teacher education has generated a focus on the importance of in-service training as one strategy to address the dearth of quality teachers (Rizvi & Elliott, 2007). Hussain and Ali (2010) argue that unless teachers access continuous and systematic PD, the very quality of their work will remain questionable. At the policy level, the government has shown interest in improving and extending in-service training. The National Education Policy 2009 reads:

All teachers shall have opportunities for professional development through a programme organised on a three-year cyclic basis. Progress in career shall be linked to such professional development. In-service training shall cover a wide range of areas: pedagogy and pedagogical content knowledge; subject content knowledge; testing and assessment practices; multi-grade teaching, monitoring and evaluation; and programmes to cater to emerging needs like training in languages and ICT. (Ministry of Education, 2009a, p. 38)

Due to the lack of resources and, therefore, a capacity to fulfill the promises concerning the inservice programmes, Government of Pakistan has heavily depended on donor agencies and private organisations for in-service PD provision (Lister, Bano, Carr-Hill, & MacAuslan, 2010). Consequently, a huge number of NGOs have intervened to supplement government efforts in improving the quality of teachers through various projects and in-service teacher development programmes. Most of these agencies use the conventional external workshop ranging from a few hours to several weeks courses. The projects also vary regarding the aims and content, which are largely determined by the intentions and priorities of individual donors. Various reports on teacher training in Pakistan suggest that there is a communication and collaboration gap among these organisations. Instead of sharing good practices, they work in isolation. They have their unique agendas resulting in non-standardized programmes for teachers (UNESCO, 2006). In addition, there is no communication and linkage between the training institutes and the school system (Ali, 2011).

Although, in-service programmes are organised for teachers by the different organisations, given the size of Pakistan and the complexities already noted, the programmes available to teachers may be imagined as a few raindrops into the silent ocean. Research identifies that in-service PD

programmes reach an insignificant proportion of teachers (G. R. Memon, 2007). According to a report of UNESCO (2006), on average, a primary teacher attends in-service training after thirteen years and a middle school teacher after seven to eight years. A teacher serving in high school receives such opportunity after sixteen years. Evidence suggest that many teachers receive no in-service training throughout their career (G. R. Memon, 2007). Consequently, the existing in-service programmes are insufficient to address the dearth of teacher quality compounding the outcomes generated through substandard pre-service training.

Of additional concern is research that noted that for the minimal few teachers who attended inservice programmes, no visible difference was observed in their classroom practices (Mohammed & Harlech-Jones, 2008; Nawab, 2017). Mohammed (2006) notes that one of the reasons that restrict the implementation of new practices is the big difference between the cultures of the training venue and the schools. This view is supported by Westbrook et al. (2009) who revealed that the in-service trained teachers found 'little practical value' in their training due to the difference between classroom practices and the theories as presented in their training. Planners' lack of understanding of the teachers' context is considered a major reason for the lack of relevance of these programmes (Mohammed, 2006; Mohammed & Harlech-Jones, 2008).

In addition, many other organisational and cultural factors have been reported which restrict implementation of learning. Westbrook et al. (2009) revealed that the 'restricted professional culture' is a hindrance for trainee teacher⁶ to put the theory into practice. Support for this observation also comes from a report of UNESCO (2006, p. 50) which reads that "a supportive school organisation typically is not present in Pakistani schools, where internal politics, lack of resources and disinterest in pupil learning and school improvement by management result in demotivating and ignoring the teachers". Similarly, other research has highlighted the lack of administrative, professional and emotional support for teachers to assist them to translate theory into practice (Hussain & Ali, 2010; Mohammed, 2004, 2006; Rizvi & Elliott, 2007; Simkins, Sisum, & Memon, 2003). In relation to these widespread concerns, Mohammed (2004) believes that unless teachers are provided with ongoing support at their school, they are very unlikely to trial new practices.

Researchers in Pakistan have recently implemented some innovative teacher development models recognising teacher development is fundamental to improving outcomes for students in schools. "These models aim at cascading of training to have a greater multiplier effect and taking training to schools to bridge the gap between teacher training and school realities" (Ali, 2014, p. 4). Rarieya (2005), for example, introduced reflective practice as a model for teacher

⁶ In this thesis, trainee teacher is used to refer to in-service teachers undertaking PD.

development and worked with teachers as a reflective coach in their schools. She reveals that when teachers were exposed to reflective practice, they improved enormously. However, due to heavy workload, lack of resources and bureaucratic organisational structures, teachers faced challenges to adapt and continue with reflective practice.

Cluster-based Mentoring is another innovative teacher development model that has been trialed in Pakistan (Hussain & Ali, 2010). Under this model teacher mentors were initially trained in a university who, on their return to schools, conducted weekly workshops for teachers in different clusters. The programme was a success as it had a positive impact on the attitude and practices of teachers. However, the sustainability of the donor funded in-service projects has been questionable. A critical overview of these programmes suggests that they have been less successful in institutionalising the introduced models. "In most of cases the changes introduced by these programmes have proved to be bubbles on the water surface; changes or the effects of these changes disappeared when the funding dried up" (Ali, 2011, p. 211). Likewise, the donor funded in-service programmes focus only on improving the pedagogical practices of teachers without giving any attention to school structures, cultures and other aspects. Consequently, these programmes result in unresolved problems for teachers who gradually return to traditional practices (UNESCO, 2006).

1.4 Rationale for this Research

The evidence presented thus far indicates that access to effective PD in Pakistan is a major problem. Although some teachers avail limited in-service PD, the quality and outcomes of these activities have failed to impact on teachers' practices in any significant way. An important question to ask in the Pakistani context is how to design and align PD models with the needs and realities of teachers. Commentary of the Dakar Framework for Action (World Education Forum, 2000, p. 20) states that teachers should "be able to participate, locally and nationally, in decisions affecting their professional lives and teaching environments". Academics in Pakistan have also highlighted the importance of involving teachers in the design of PD (Ali, 2011; Mohammed, 2006; Mohammed & Harlech-Jones, 2008; Rizvi & Elliott, 2007; UNESCO, 2006). However, despite persistent calls, this requirement is yet to be addressed (Kanu, 2005; UNESCO, 2006). Consequently, there is a lack of understanding about teachers' preferred development needs, what they value and what proves effective PD for them given the realities of their school and classroom. Through the experience of teachers, we need to understand what knowledge, skills, capabilities and professional dispositions teachers gain from PD, what facilitates the enhancement of these aspects and what enables them to implement their learning.

On the other hand, PD is a complex process. Although exploring the views and experiences of teachers will indeed yield valuable data to inform the design and delivery of PD, many other

stakeholders may also provide equally significant insights. The need of consultation with a variety of stakeholders has been stressed in Pakistan (Ali, 2011; Mohammed, 2006; Mohammed & Harlech-Jones, 2008; Rizvi & Elliott, 2007; UNESCO, 2006). These authors have suggested allowing all partners to define their unique conditions and situations. It has been argued that such consultation with stakeholders may be laborious and time-consuming, however, the consequences of ignoring it will be more severe (Mohammed, 2006).

Thus far, the many and varied issues surrounding teacher education (pre-service and in-service) in Pakistan have not been well explored through research (Ali, 2011; Mohammed, 2006). Although some research exists on teachers' learning in Pakistan exists there are two major gaps. Firstly, there is a lack of in-depth understanding of the field which draws on quantitative and qualitative research (Ali, 2011). Secondly and most importantly, the existing research is generally limited to urban or semi-urban areas. The evidence presented earlier on the status of education in Pakistan showed that the achievement of students in rural areas is much lower than their counterparts in urban or semi-urban areas. It calls for increased attention on rural areas to afford underprivileged students with quality education. Since student achievement depends on the quality of teachers (Guskey, 2002) and the quality of teachers is determined by the preservice and in-service preparation they receive, we need to understand what types of PD teachers attend in rural Pakistan and how effective they are. Contextual differences bring different implications for the needs of teachers and subsequently for their PD. However, we do not know what makes PD effective for teachers in rural Pakistan.

1.5 Purpose of the Study

Thus, the purpose of this study is to explore and understand the perceptions of key stakeholders in rural Pakistan concerning effective PD. It aims to understand what makes PD effective and valued for key stakeholders, namely, providers of PD, officials of education department, school principals and teachers. Drawing on their experiences, guidelines to inform those charged with the design and delivery of high-quality professional learning in Pakistan in general and in rural Pakistan in particular are developed.

1.6 Research Question

What makes teacher professional development effective and valued in rural Pakistan?

1.6.1 Sub-Questions

- 1) How do key stakeholders define PD?
- 2) What do key stakeholders believe are the purposes and outcomes of PD?
- 3) What are key stakeholders' experiences of PD?
- 4) What criteria do stakeholders use to determine the effectiveness of PD and why?

- 5) What do key stakeholders suggest will improve the quality of PD and transfer of learning to the classroom?
- 6) How might this knowledge be used to improve the quality of PD in rural Pakistan?

1.7 Significance of the Research

Understanding the perceptions of key stakeholders on effective PD is significant in many ways. Both experience and studies conducted in Pakistan suggest that the existing teacher development programmes have failed to show any significant impact on classroom practices (Mohammed, 2004, 2006; Mohammed & Harlech-Jones, 2008; Nawab, 2017; Westbrook et al., 2009). Unless we consider the strengths and weaknesses of the existing programmes through the perspectives of a variety of key stakeholders, PD providers will continue testing their assumptions and waste time and resources on activities which have no or little impact upon the practices of teachers. As an outcome of the research, PD providers have the opportunities to design their programmes based on what works for teachers and subsequently intervene in a more informed way. Moreover, understanding the perspectives of key stakeholders informs policy makers in formulating PD policies according to the needs and realities of teachers and schools. The research also addresses the calls of those concerned people who claim that teachers' voices are unheard in policies and design of professional development.

If the policies and design of PD programmes are informed by the experiences and perspectives of teachers, teachers will not only have access to more relevant PD but also be motivated to attend these programmes and to implement their learning. Experience suggests that schools and teachers are reluctant to participate in existing PD programmes. While sharing their experience with the training facilitators including the researcher, teachers have indicated that they attend PD but owing to the lack of relevance, existing programmes make limited difference in their practices. Once PD activities are designed based on the needs of teachers and schools, it is hypothesised that more teachers will attend and benefit from more relevant PD programmes. Since the ultimate aim of any school is enhancing the achievement of students and student achievement is closely linked to the capacity of teachers (Darling-Hammond, 2004; Guskey, 2002), there is potential for student achievement to be enhanced through providing more relevant PD opportunities to teachers.

The research outcomes will add to the existing knowledge on PD, particularly in the Pakistani context given the current dearth of local studies. Most importantly, this research seeks to provide insights on education in rural Pakistan through exploring the views and experiences of stakeholders in that region whose needs and interests have so far been left unattended. It is expected that, as a result of this research, teachers in rural Pakistan will be provided with more

effective PD opportunities. Consequently, it is hoped the beneficiaries of the research will be the students in rural Pakistan.

This research is also significant for my future career. After completion of my studies, I expect to resume working in rural Pakistan and to be involved in capacity building of schools and teachers. As a result of this research, I will have greater knowledge of what teachers and other stakeholders value which will enable me to work in a more informed way. Since I expect to have a voice in the design of PD programmes once I return to my context, I will contribute to developing and implementing more effective learning experiences for teachers.

1.8 Research Approach

The setting for this research is Chitral, a remote and rural district of Khyber Pakhtunkhwa province, Pakistan. Further details on the research setting are provided in Chapter Three, page 50. The research employs an interpretivist paradigm and qualitative approach. The participation of key stakeholders, namely, teachers, school leaders, PD providers and officials from education department are included in this research. Focus group interviews, questionnaire and document analysis are used as primary tools and procedures to generate data. The data are analysed using a Grounded Theory (GT) framework to allow the emergence of theory from the data. The research methodology is described in more detail in Chapter Three.

1.9 Focus of this Research

The context of rural Pakistan provides limited opportunity for PD and the majority of PD is offered as a programme. Therefore, the main focus of this research is the PD programmes offered by two PD provider organisations as highlighted in the methodology chapter (page 51). However, one of the questions posed to participants sought their views of PD indicating the research was not solely focused on PD as programmes. The methodology was Grounded Theory, therefore general constructions and terminologies regarding PD were used to allow for the participants diverse conceptions of PD to be illuminated and explored.

1.10 Organisation of the Thesis

The thesis is divided into the following eight chapters.

Chapter One has introduced the topic and provided a brief background to the research focusing on the education system and teacher education in Pakistan. The chapter has also presented a rationale for undertaking the current research, stated the purpose, listed the research questions and provided an argument regarding the significance of this research.

Chapter Two reviews and critiques the existing literature on PD of teachers. It includes themes namely teacher professional knowledge, meaning of PD, adult learning theories, models of PD and characteristics of effective PD. The chapter also identifies a gap in the existing literature reported from other contexts and discusses the lack of evidence to generalise knowledge on PD across contexts. A conceptual framework that guides this research is presented at the end of the chapter.

Chapter Three presents the methodology of this research. It introduces the research design, research paradigm and research method, and justifies the selection of these lenses and procedures. This chapter also details the research setting and discusses data generation tools and data analysis methods. It concludes with ethical considerations for the research.

Chapter Four reports stakeholders' perceptions and experiences of PD. First, the chapter presents and interprets data emerging from the questionnaires focusing on the perceived meanings, purposes and outcomes of PD are presented. The chapter, then, moves on to the major theme of the thesis, features of effective PD. These features include: relevance of PD to the real needs of teachers; focus of PD on both content and pedagogy; provision of active learning experiences; programmes of long duration; access to regular and ongoing PD and provision of follow up support.

Chapter Five focuses on the contextual factors that influence the possibility and quality of PD. These factors include dependency of stakeholders on external workshops, issues related to monitoring and accountability, limitations of the role of school leadership in PD of teachers, teachers attitude and behaviour, and resource factors.

Chapter Six presents a synthesis of the findings and makes certain claims and arguments about PD of teachers in rural Pakistan. The chapter critiques features of effective PD as they have emerged in this research and as presented in educational literature. The existing models of PD on offer for teachers in rural Pakistan are critiqued based on their limited relevance to the needs and realities of teachers. The chapter also recognises the importance of the context in PD of teachers.

Based on the existing situation, Chapter Seven proposes a model for effective PD of teachers in rural Pakistan. The model suggests that to provide teachers with effective PD opportunities, both PD providers and the system where teachers work should revisit their existing approaches and practices. PD is a complex process, and all the actors in the arena should perform their positive and active role to afford teachers with quality PD.

Chapter Eight concludes the discussion and highlights the contribution of this research. The chapter also shares some personal experiences of using grounded theory in this research as

well as some cultural and social aspects of the region for the consideration of future researchers. The limitations of this research are also stated. The chapter finally suggests areas for further studies.

1.11 Conclusion

This chapter introduced the topic under investigation and provided a brief background to the education system in Pakistan in general and teacher education in particular. It has shown that the standard of education in Pakistan is unsatisfactory, and the situation is further aggravated by remoteness. The poor quality of education is owed to the outdated pre-service teacher education. Although, many NGOs have intervened to address the dearth of quality teachers through provision of in-service teacher education, earlier studies have questioned the impact of these programmes on the practices of teachers. This background provided a rationale for this research that, drawing on the experiences of the key stakeholders, aimed to understand what makes PD effective for teachers in rural Pakistan.

The next chapter will review literature on PD of teachers to understand what makes PD effective in other contexts focusing what we know and what we need to know.

2. LITERATURE REVIEW

2.1 Introduction

Aiming to understand what makes PD effective, this chapter reviews existing literature on PD of teachers. Given the extensive nature of research on PD and a growing body of research on professional learning key areas have been selected for review in this research given their relevance to the research context and questions. Figure 2.1 presents an overview of the key areas associated with PD reviewed in this chapter.

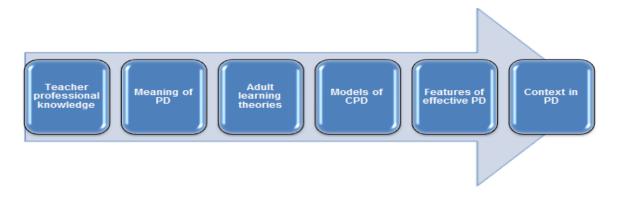


Figure 2.1 Framework for literature review

As represented in the figure, the chapter commences with teacher professional knowledge to establish what knowledge, skills and dispositions a teacher of today requires to successfully meet the evolving demands of modern schooling. Building on teacher professional knowledge, the chapter moves on to the meaning of PD discussing how PD is defined in the scholarly literature and what differences, if any, exist between PD, CPD and other related terms. Since PD is a concept mainly related to adults, adult learning theories are briefly reviewed. These theories will enable readers to understand the extent to which the trends and features (subsequent themes) are informed by adult learning theories. Next, the chapter presents models and trends in PD encompassing critique on training models and detailing the growing trends toward situating teacher PD activities in the work context. Then the chapter moves on to describing features of effective PD, highlighting the seeming consensus as well as the lack of agreement among researchers on the features of PD. This debate takes us to the next section, namely, context influencing PD. In this section, details are provided on how contextual realities and needs of teachers bring different implications for their PD. The chapter concludes highlighting the importance of involving relevant stakeholders in the design of PD activities. Consequently, the literature links us back to the purpose of this research; what makes PD effective for stakeholders in a particular context. The chapter also includes a conceptual framework that will guide the research in designing and using tools for data collection and analysis. A summary of the chapter is provided at the end.

It is also indicated at this stage that the research design uses Grounded Theory (GT), hence the literature review is designed to introduce literature of relevance to the study. But as the research is conducted over a period of time, additional literature will be consulted and included in the analysis and discussion chapters as part of the GT method. As such, not all literature consulted as relevant to the thesis will be introduced in this chapter. The literature in this chapter was reviewed in establishing the research design while literature included in analysis and discussion chapters was a result of ongoing engagement with new literature as relevant to the research findings and theory building process; as consistent with GT methods.

2.2 Teacher Professional Knowledge

The constantly changing global forces added by advanced technologies have brought tremendous challenges and demands for today's teachers. Previously teachers were expected to prepare a small minority of students for a restricted workforce. However, as Bransford, Darling-Hammond, and LePage (2005) observe, teachers are "now expected to prepare virtually all students for higher-order thinking and performance skills once reserved for only a few" (p. 2). The work of teachers has become further challenged given that student achievements have closely been linked with the quality of teachers (Guskey, 2009; Hattie, 2008; Timperley, 2008). These demands, consequently, have substantial implications for professional knowledge of teachers.

Shulman (1986) classifies teacher professional knowledge into three broad categories namely content knowledge, pedagogical content knowledge, and curricular knowledge. Content knowledge refers to the knowledge a teacher needs to possess to be successful with students in the relevant subject. This knowledge includes the ability to define the concepts in a subject or discipline, explaining their importance and showing their relation to other subjects in theory and practice. Pedagogical content knowledge, on the other hand, refers to the skills or ways to present the subject or the truths and concepts to the learners preferably through "powerful analogies, illustrations, examples, explanations, and demonstrations ... that make [the subject] comprehensible to others" (Shulman, 1986, p. 9). Curricular knowledge refers to knowledge regarding the learning goals of the subject, the materials and procedures to achieve those goals.

Banks, Leach, and Moon (2005) further modified and enriched Shulman's model of teacher professional knowledge. They critiqued Shulman's work arguing that, instead of focusing on the process of learning, this work views knowledge as an external body of information and focuses on the knowledge and skills a teacher possesses. They replaced Shulman's curricular knowledge with 'School Knowledge' that is "related to the way subject knowledge is transformed for schools and including an understanding of the historical and ideological construction of that school knowledge" (336). The authors have added a new area called 'personal construct' to the

professional knowledge of teachers. The personal construct is a combination of past knowledge, experience of learning, and personal views and beliefs on teaching and purposes of subjects.

Whereas Banks et al. (2005) modified Shulman's model replacing 'curricular knowledge' with 'school knowledge', and added 'personal construct', Bransford et al. (2005) added yet another construct, 'knowledge of learners', making teacher professional knowledge further learner-oriented. The knowledge, skills and dispositions they envisage for teachers are:

- a) knowledge of learners and how they learn and develop with social contexts,
- b) conceptions of curriculum content and goals: an understanding of subject matter and skills to be taught in light of the social purposes of education, and
- c) an understanding of teaching in light of the content and learners to be taught, as informed by assessment and supported by the classroom environment. (p. 10)

The list suggests that learners are gradually gaining growing recognition for their importance in consideration of teachers' knowledge and capabilities. This assertion is further supported by another list presented by Timperley and Alton-Lee (2008) who place even greater focus on learners. The knowledges which they expect teachers to possess include:

- a) discipline knowledge or curriculum knowledge;
- b) pedagogical content knowledge/pedagogical knowledge;
- c) assessment knowledge;
- d) students (learning, behaviour, culture);
- e) social constructions of students;
- f) linguistic and cultural resources;
- g) own practice and new possibilities in relation to a standard;
- h) how own practice impacts on diverse student learners and new possibilities. (p. 342)

A careful analysis of the teacher professional knowledge as presented above suggests that the recent expectations from teachers especially in relation to enhanced focus on learners make teaching a highly demanding and challenging job. The situation is aggravated by the fact that today's learners are more varied in their social, cultural, emotional and learning backgrounds (Lohman, 2000) necessitating greater and better knowledge of learners in order to be successful with them. These knowledges, skills and dispositions are not inherent capacities; rather they are acquired and developed through exposing teachers to PD activities (Bransford et al., 2005; Fullan, 2007; A. Hargreaves, 2002). This background leads us to what is PD.

2.3 Meaning of Professional Development

Within education, PD, CPD, Professional Learning (PL) and In-service are contested terms, and in the literature, clarity of differences between the terms is lacking. In some countries, PD refers to initial teacher education whereas CPD is associated with PD taking place after initial teacher

education (King, 2014). Similarly, for most developed countries, in-service education includes those teacher education activities that follow initial professional certification. However, in some developing countries, teachers enter the profession without any certification, and in-service teacher education activities are the only preparation they receive for teaching (Villegas-Reimers, 2003). In addition, some authors including Fullan (2007) and Easton (2008) prefer using the term Professional Learning (PL) instead of PD arguing that the word development suggests a deficit model where someone supposedly having greater knowledge or skills teaches or does something to others who are assumed to be lacking in knowledge. These authors argue that since teachers need to change on an ongoing basis, they require to be engaged in PL on a daily basis. However, the analysis of the meaning of both PD, CPD and PL within the scholarly literature reveals that even the definitions of PD include qualifying terms such as 'ongoing', 'informal', 'internal' among others that are otherwise usually associated with CPD or PL. It suggests that there is no clear difference between PD, PL and CPD. Therefore, to avoid any confusion for readers, PD is used as a common term in this research which connotes both CPD and PL, and refers to all formal and informal learning activities carried out to enhance the capacity of teachers. Nevertheless, in some cases, the terms CPD and PL are also used in places where the researcher analyses the work of other authors who have used these terms. For example, while analysing the CPD models proposed by Kennedy (2014) (page 25), the researcher uses the same term as used by the author. Similarly, while discussing the recent trends in PD of teachers, the term PL is used to differentiate this concept from PD (see page 28). In addition, using the constructivist grounded theory framework, this research covers a journey from PD to PL. Consequently, in arriving at the concluding stage of this journey, the researcher also uses the term PL while suggesting a more innovative model of PD for teachers in the research region.

In the following section, definitions of PD provided by renowned academics and that have frequently been used in PD literature are presented. These definitions and their analysis will allow readers to appreciate the meaning of PD and how this term connotes CPD and PL. Drawing on these definitions, PD will also be defined for this research.

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 and 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 purposes 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 through each phase of their teaching lives. (Day, 1999, p. 4)

Professional Development is an ongoing and systematic process that includes activities such as discussion, investigation, experimentation with new practices, learning, expansion of knowledge, acquisition of new skills, and the development of approaches, stances, knowledge, and work tools. (Shagrir, 2012, p. 23)

Professional development programs are systematic efforts to bring about change in the classroom practices of teachers, in their attitudes and beliefs, and in the learning outcomes of students. (Guskey, 2002, p. 38)

The analysis of the definitions given above suggests that PD is a broad concept having many dimensions. Firstly, PD could be either 'formal' or 'informal' or in other words, 'planned' or 'natural'. Formal learning is conscious and planned such as workshops, structured peer coaching and mentoring and so on. The natural or informal learning, on the other hand, happens any time through any source such as observation, reflection, informal talk, trial and error and so on. Secondly, as emerges from the given definitions, PD is an ongoing and sustained process by which teachers continually update their practice through exploiting many strategies. It is not confined to a particular event such as a one-off workshop. Lastly and importantly, the aim of PD is improving the 'quality of education in the classroom' or enhancing the practices of teachers in order to enhance the achievements of students. Consequently, the end beneficiary of PD is the student.

Drawing on an analysis of these definitions, PD for this research is defined as:

All informal and formal activities carried out alone or with other teachers which contribute to improved classroom practices ultimately leading to the enhanced academic achievement of students.

Since PD is a form of adult learning (Zepeda, Parylo, & Bengtson, 2013), to appreciate and critique trends in place to facilitate teacher professional knowledge and PD, we need to understand how learning occurs, especially in the context of adults.

2.4 Adult Learning Theories

Scholarly research on adult learning (Knowles, 1973; L. Leach, 2000; Nesbit, Leach, & Foley, 2004) show that adult learners differ from young learners because of their diverse needs, orientations, experiences and levels. Such differences have led to different theories and perspectives on facilitation of adult learning. These perspectives include self-directed learning, experiential learning, reflective learning, transformative learning and situated learning. The following sections briefly discuss varying perspectives on adult learning.

2.4.1 Self-directed Learning

The idea of self-directed learning emerges from a view of learning being facilitated rather than taught. It has been argued that instead of being directed by others, adult learners better manage their own learning through exploiting various sources and strategies (L. Leach, 2000; Nesbit et al., 2004). This concept of adult learning is supported by the assumption that learning experiences result in 'changes in self-concept' (Knowles, 1973, p. 45). Learners, as they grow

and mature, develop a psychological need to be a self-directed individual, and if not treated according to this psychological need, they experience tensions which lead to reaction and resistance. Therefore, to facilitate learning of adults, they should be treated as mature individuals who possess the capacity to manage their own learning instead of being entirely dependent on others.

Adults also have an inclination towards learning in response to the changing and growing demands placed on them. Knowles (1973) maintains that as individuals grow and mature, their readiness to learn is motivated by the requirements of evolving social roles and developmental stages. The changing social and professional roles of individuals demand more and novel learning to be an effective player at home, in organisations or within society. Teachers need to learn and improve because they need to update their practices according to the changing demands of teaching. Consequently, as the need for learning increases so also does the readiness to learn (L. Leach, 2000). Moreover, adults seek immediate solutions to their emerging issues which they face in coping with some life or professional problems. Such needs incline them towards a self-directed approach to learning (Knowles, 1973).

2.4.2 Experiential Learning

Another assumption of adult learning is the 'role of experience' (Knowles, 1973). This assumption suggests that as an individual matures, he/she accumulates vast experiences that work as a rich source for learning as well as provide a base upon which new learning can be built (Bereiter & Scardamalia, 2014). The implication of this assumption is that instead of transmittal methods of teaching, the experiential techniques work best with adults as such techniques engage them in analysing their experiences. The role of experience also suggests that as individuals mature, they accumulate vast experiences. Therefore, the individual diversity among adults is greater than that amongst young children due to the variety and extent of individual experiences. Consequently, "A group of fifty-year-olds are more different from one another than a group of forty-year-olds, who in turn, are more differentiated than a group of ten-year-olds" (Knowles, 1973, p. 46).

Taylor (2009) maintains that individual learning is related to previous experiences a learner brings and the nature of experiences in the classroom created by the educators. Both prior experience and classroom experience provide a base for learners to discuss and reflect and thus to construct new understanding. The greater the experiences the deeper the insights to draw upon.

2.4.3 Learning as Reflective Process

Critical reflection is another principle of adult teaching and learning. Argyris and Schon (cited in, Nesbit et al., 2004) indicated that instead of depending on formal theory, practitioners draw on

their own knowledge of practice through reflection. Reflection, in this sense, is linked to action research where practitioners continually plan, act, observe and reflect on their practice. Since practitioners re-evaluate their experiences, reflection is, therefore, also termed as a 'retrospective process' (Nesbit et al., 2004). Reflection enables teachers to continually examine their practice and to learn on an ongoing basis.

In the 'learning as reflective process', the individual is the central focus who engages in meaning making through reflection. In this perspective, it is assumed that as learners reflect on their experiences, they construct knowledge through actively interpreting what they see and hear (Fenwick & Tennant, 2004). In a group of adult learners who listen to a lecturer, based on their own interpretation, individual learners make personal meaning out of what the presenter says. The central belief of reflective theories is "as learners we construct, through reflection, a personal understanding of relevant structures of meaning derived from our actions in the world" (Fenwick & Tennant, 2004, p. 60). It is the process of questioning the integrity of assumptions and beliefs (Taylor, 2009). Our perceptions and beliefs that guide our practices are rooted in our experience, thus critical reflection enables learners to deeply analyse the health of those assumptions and beliefs. Taylor (2009) lists three forms of reflection. The first form is content, which is about reflecting on what we think, perceive, feel and act. The second type is process, which is reflecting on how the functions of perceiving are performed. The last form is premise, a mindfulness as to why we perceive. Briefly, reflection is a critical examination of self, aiming at an ongoing improvement. Since reflection is a readily available tool, it has been considered a powerful model for teacher learning.

2.4.4 Transformative Learning

Transformative learning is about how adults learn to reason instead of acting upon the assimilated beliefs, feelings, values and judgment of others. Although transformative learning is closely linked to the process of critical reflection, it is more than reflection. In a way, transformative learning is a form of reasoning that incorporates many of the other adult learning principles such as experiential learning and learning as reflective practice. According to K. Brown (2006), "Transformative learning is a process of experiential learning, critical self-reflection, and rational discourse that can be stimulated by people, events, or changes in contexts that challenge the learner's basic assumptions of the world" (p. 706). Once such assumptions are challenged and revisited, people look at themselves and the world through a different perspective.

This learning theory explains how the meanings people derive from experiences are influenced by cultural assumptions. Mezirow (2009) believes that our thoughts, feelings and habits are based on structures of assumptions (frames of reference). How we categorise experiences, beliefs, people, events and the self is subject to these frames of reference. Transformative

learning is a process of "learning that transforms problematic frames of reference to make them more inclusive, discriminating, reflective, open, and emotionally able to change" (Mezirow, 2009, p. 22). In transformative learning, new information is incorporated into, or alters the existing frame of reference (Mezirow, 1997). Critical thinking is encouraged, and the discourses are participatory and interactive involving deliberation and problem-solving. Learners are involved in experiential activities that enable them to personally experience the activity through action and reflection (Taylor, 2009). In a transformative educational process, educators work as facilitators, challenging assumptions, provoking questions and facilitating learners to discover answers to their arising questions. The process of transformation is perceived by learners to be threatening at times as it challenges their personally held understandings of themselves and the world. This perception, however, can be overcome through establishing trusting relationships with them. Such authentic relationships also allow critical questions and open discussions (Taylor, 2009).

Unlike the conventional approaches to learning that focus on the transmission of facts (Gonczi, 2004), the adult learning perspectives outlined above perceive learning as an active, reflective, self-directed and experiential process. However, the focus of these perspectives is the individual, where context is subject to less attention in the facilitation of learning. This gap in adult learning is addressed by another view of learning: Situative Perspective.

2.4.5 Situative Perspectives

Situative theories of learning conceptualise learning as more relational and contextual. Lave and Wenger (1991) believe that individual and his/her cognition cannot be separated from the context. They emphasise learning as participation in the social world, arguing that learning is a social practice, spread over mind, body and culturally organised setting.

This perspective is elaborated by Putnam and Borko (2000) who posit three conceptual themes of situative perspective, namely, cognition as situated, cognition as social and cognition as distributed. *Cognition as situated* expounds that physical and social contexts are integral elements of an activity and the learning. Instead of focusing on the individual as the basic unit of analysis, cognition as situated focuses on the interactive systems within which the individual interacts with others and the materials. *Cognition as social* assumes that what is learned and how something is learned depends on the interactions of people in one's environment. As individuals participate in discourse communities, they are exposed to the tools, ideas, theories and concepts of other members, which they appropriate as their own. Learning is 'enculturation' into the group's ways of thinking. *Cognition as distributed* propagates that learning is not a property of individual; it is, rather, stretched over the individuals, other persons and various tools and artifacts.

Support for this perspective of learning also comes from Activity Theory (Engestrom, 1999). This theory assumes that knowledge is socially constructed using 'culturally available resources' referred to as infrastructure of knowing. The infrastructure of knowing includes the concepts, tools and technologies shared by the members of the community. The quality of knowing depends on the interactions between the mental processes of individual members and the structures and procedures used for knowing.

To sum up, adult learning theories as discussed above suggest that instead of being directed or imposed by others, adults manage their own learning. The roles they play demand and incline them towards self-directed learning. Moreover, they have rich experiences to draw from while learning. Most of their learning happens through reflection on their assumptions, beliefs and practices. Similarly, learning is relational, contextual and socially constructed. Learning happens as individuals interact in their respective contexts using contextually and culturally available tools.

The principles of adult learning theories, as discussed above, have significant implications for the PD of teachers. Since teachers are adult learners, it could be claimed that effective PD for them would be the one that considers the principles of how adults learn. This assertion raises noteworthy questions about the delivery of PD programmes in rural Pakistan. For example, how informed are the PD programmes by the adult learning theories? In other words, to what extent do the providers of PD consider adult learning principles in the design and delivery of their PD programmes? These are interesting and timely questions to explore in relation to the experiences of the key stakeholders in rural Pakistan.

In the next sections, the existing trends and models in PD as portrayed in educational literature will be analysed to understand how aligned the existing models reported form other contexts are with the learning theories presented above. Such analysis will also provide a base to critically analyse the models of PD in place in the research region.

2.5 Models and Trends in PD

A. Kennedy (2014a) categorises CPD into eight models as shown in Figure 2.2 below. These models include training models, deficit models, cascade model, award-bearing models, standards-based models, coaching/mentoring models, community of practice models and collaborative professional inquiry models. Kennedy maintains that the purpose of the beginning three models is 'transmissive' aiming at preparing teachers to implement reforms. The last model is 'transformative' aiming at supporting teachers to contribute to and shape education practices. The four models lying in the middle are 'malleable' having the capacity to support the underlying agendas of the other two purposes of PD. For example, "mentoring can be used to

support and encourage autonomy, creativity and independence, but equally, can be used as a powerful means of professional socialisation to encourage conformity to the status quo" (A. Kennedy, 2014a, p. 692).

Purpose of Model		Examples of models of CPD which may fit within this category
Transmissive	Increasing	Training models Deficit models Cascade model
Malleable	capacity for professional autonomy and teacher agency	Award-bearing models Standards-based models Coaching/mentoring models Community of practice models
Transformative	1	Collaborative professional inquiry models

Figure 2.2 Spectrum of CPD models, adopted from Kennedy, 2014

The downward pointed arrow in the middle of the figure suggests an increasing capacity for professional autonomy and teacher agency. In other words, the beginning models are more externally driven whereas the transformative models are more internally initiated.

Whereas Kennedy categorises PD models based on reduced/increased capacity or professional autonomy and teacher agency, some scholars classify PD into traditional versus reform types (Garet, Porter, Desimone, Birman, & Yoon, 2001) or traditional vs innovative models (Kooy & van Veen, 2012). The traditional types of professional development such as workshops usually take place outside school or classroom. The reform models such as study groups or mentoring and coaching, on the other hand, are usually located in the work context. Kooy and van Veen (2012) sketch the difference between traditional and innovative models in the following way.

Traditional refers to the way PD was organized for the last decades; mainly through lectures, 1-day workshops, seminars and conferences, which were not situated at the workplace, in which teachers played passive role, and in which the content was not adjusted to the problems and issues in the daily teaching practice. Innovative forms refer to all those interventions in which teachers play an active role and the issues in their own teaching practice determine the content. Some examples are collaboration of colleagues, study and book clubs, mentoring, coaching and research by teachers. (p. 1)

Building on this quotation, the traditional and reform models are further elaborated in the following sections.

2.5.1 'Transmissive' or Traditional Models

Sparks and Loucks-Horsley (1989) indicate certain assumptions underpinning the traditional models. Firstly, through training, teachers will equip themselves with those behaviours that were lacking previously. Secondly, there are certain teaching techniques need to be learnt and to be

replicated in the classroom. Teachers learn these vital techniques through attending training. However, the effectiveness of the training or traditional model of PD has been criticised on certain grounds. One argument against this model is that even if well designed, learning cannot be transferred in the same form from training venue to the classroom (Webster-Wright, 2009). This argument is further supported by the concern of teachers that learning experiences that are provided by external agencies who have no connection with their schools are remote from classroom realities (Putnam & Borko, 2000). The focus in this kind of context remains on transmitting knowledge, which rarely enables teachers to develop skills or to implement improved teaching practices on their return to school (Cole, 2005). Moreover, Individual attendance at external PD tends to focus on individual teachers' learning needs rather than contributing to recognising and contributing to school-wide improvement needs (Easton, 2008). Even when a teacher develops the required skill sets that align with challenges in their own school contexts, without a professional learning culture in school, the opportunity or possibility of an individual teacher to influence the practices of other teachers is extremely limited. "A single messenger has to be extremely persuasive in order to convince the majority of the school staff that a new approach should be adopted" (Cole, 2012).

External PD models have also been criticised because of their failure to address the learning needs of individual teachers. When teachers attend traditional courses located outside a school, there is a risk that the mode of delivery will not suit all participants as the learning styles and levels differ from individual to individual (Postholm, 2012). It has been argued that the learning requirements of a novice teacher need not necessarily be the same as that of an experienced teacher (Sparks & Loucks-Horsley, 1989). Since external PD activities are attended by a highly diverse group of teachers, it is challenging to understand and respond to the needs of individual teachers (Cole, 2005). Consequently, when PD providers decide content based on their personal assumptions, teachers are less likely to find specific solutions for their individual needs.

Lastly, these external workshop models of PD are largely one-off activities aiming at mastery of a selected set of knowledge and skills (D. Clarke & Hollingsworth, 2002) and as such aim to provide advice and tips for teachers to try in the classroom regardless of the need (Ball & Cohen, 1999). In this way, teachers are treated as 'technicians' who are taught some particular behaviours and then expected to replicate them in their classrooms (Timperley, 2008). This approach not only implies transmission but also moves the emphasis from the "knowledge-deficient" professional to the "knowledge-possessing" provider" (Webster-Wright, 2009, p. 713). The provider of teacher education is considered to know everything, whereas the teacher is believed to be lacking knowledge. Thompson and Zeuli (1999) believe that "most current professional development reflects the same deep-seated schemas of knowledge as facts and skills, teaching as telling, and learning as remembering" (p. 353). Such technical models are

considered inappropriate if the purpose of PD is developing a skilled and well-educated teaching force (Dadds, 2014).

PD under training models, such as those that have been outlined above is predominantly a one-time activity, conducted outside school or classroom with a focus on transmission and imposition of standards on teachers. These models are mainly against the principles of adult learning theories that propagate self-directed learning, experiential learning, reflective learning, transformative learning and situative learning. Consequently, the training models have been criticised owing to their failure to improve practices of teachers. Fullan (1993) argues that nothing has been as lavish as the workshops that teachers attend, but failed to bring any improvement in their practices. It has also been warned that if more money and time is spent on such traditional forms of PD, little return can be expected on those investments (Hawley & Valli, 2000).

Against this background, academics and practitioners have been shifting their approaches to PD in pursuit of better and efficient alternatives to facilitate teacher learning. These approaches are termed as 'reform' or 'innovative' models of PD.

2.5.2 Reform or Innovative Models of PD

Criticism of traditional models of PD as well as the adult learning theories and situated perspectives of learning have gradually led to growing recognition that development is a complex process. This appreciation has shifted approaches to teacher learning from developing an individual through a one-time activity to an ongoing practice-based collaborative inquiry. The approach builds on the conceptualisation of learning as a social practice, that engages the mind, body and socially organised setting (Lave & Wenger, 1991). Learning is unique to every individual and context and, as S. Brown and Duguid (1991) believed, "Like a magpie with a nest, learning is built out of the materials to hand and in relation to the structuring resources of local conditions" (p. 48). Support for this interpretation of learning also comes from Fullan (2002, p. 417) who argues that learning in context "is the learning with the greatest pay-off because it is more specific (literally applied to the situation) and because it is social (thereby developing shared and collective knowledge and commitments)". Different teachers and schools have their own learning needs, which they plan, implement and reflect upon if the learning activities are situated in their specific work context. Hunzicker (2011) suggests that to situate learning in the work context and to align PD with the needs of teachers, we need to shift from a 'one-shot', 'sit and get' model to an approach where learning is embedded in everyday activities of teachers.

This embedded model of learning is a process of ongoing inquiry and reflection on practices. Instead of learning within a short span of time, this model assumes that the goal of teacher education is lifelong ability to learn through ongoing inquiry (Darling-Hammond, Hammerness,

Grossman, Rust, & Shulman, 2005). Knowing is no more remembering and repeating information, it is, rather, discovering and using it (Simon, 2000). This perspective of learning and knowledge has shifted the views of how teachers might teach and what students might do in the classroom (Ball & Cohen, 1999). Teachers need to understand about the disposition of students; how children learn, what they are like, what motivates them, what their problems are and what they need to know. Ball and Cohen believe that unless teachers learn from practice through inquiry, they may not fulfil the emerging expectations from them. To be able to do what they are expected to do now, they have to ask and answer "what is working? What is not working? For whom are certain things working or not working?" (p. 10). To ask and answer these questions, teachers need to learn how to investigate and inquire. They have to draw some conclusions from their inquiry, and such conclusions have to guide their future practices. Ball and Cohen argue that all these could be learned from practice in the context, and "to propose otherwise would be like expecting someone to learn to swim on a sidewalk" (p. 12). Similarly, Thiessen (1992) maintains that "the most enduring mode of teacher development occurs on the job as teachers diligently work in their classrooms searching for, trying out and modifying strategies that best respond to the needs of their students" (p. 92).

Some scholars, therefore, even suggest replacing the term PD with Professional Learning (PL) (Easton, 2008; Fullan, 2007). Easton (2008) argues that the word development suggests that someone does something to others such as someone talks to teachers to motivate them or a specialist increases the knowledge of teachers regarding state standards. Such development or training fits the factory model of education where employees are told how to tighten a screw or animals are trained to sit and to roll. For teachers, such development is not enough given that knowledge explodes speedily forcing schools and teachers to update their practices on an ongoing basis. Since educators need to change and improve on ongoing basis, the occasional training and development do not serve the purpose. PL theories suggest that teachers "need to be able to think pedagogically, reason through dilemmas, investigate problems, and analyze student learning to develop appropriate curriculum for a diverse group of learners" (Darling-Hammond, Hammerness, et al., 2005, p. 392). Consequently, teachers take responsibility for their self-development (Watson & Michael, 2015). Research supports this view revealing that teachers can change their practices if they play a key role in the change process (Wells, 2014).

The renewed conceptualisation of PD has led to the emergence of several other innovative and reform oriented approaches to learning and development such as professional communities, discourse communities, collaborative professional learning and communities of practice (A. Hargreaves & Fullan, 2012; Killion & Roy, 2009; Putnam & Borko, 2000; Wenger, 1998). Over the past few decades, such approaches to learning have been receiving growing attention from academics and practitioners. These approaches not only encourage grounding teacher

development activities in the workplace but also portray learning as a social process that requires the participation of more individuals in the learning process. Bransford, Brown, and Cocking (1999) maintain that teachers learn from other teachers through formal and informal meetings and sharing ideas. Teachers have a natural disposition to talk to each other, and this tendency can be mobilised to gradually utilise common educational purposes starting with informal exchanges and moving towards formalised learning experiences, peer coaching and other forms of collective learning (Avalos, 2011). The other forms of collective learning include professional discourse, watching and discussing teaching videos, lesson observations, mentoring, co-teaching, discussion of student work, action research, study groups and so on (Ball & Cohen, 1999; Cross, 2011; Desimone, 2011; Easton, 2008; Eraut, 2007; Meirink, Meijer, Verloop, & Bergen, 2009).

Evidence suggests that there is a positive relation between collaborative learning models and student learning outcomes. Darling-Hammond (2004) argues that when teachers share knowledge, they learn to be successful with students. This argument is supported by Opfer and Pedder (2011a) as well as Postholm (2012) who reveal that the provision of learning activities for teachers in schools not only has potential to improve the practices of teachers but also leads to enhanced learning outcomes for students. It has also been found that the mutual learning between teachers within a school has tremendous potential to enhance the internal capacity of school to engage in continuous improvement (Opfer & Pedder, 2011a). A. Hargreaves and Fullan (2012) believe that if a school utilises its professional capital arising from its professional culture that is supported by building its own professional communities, in that climate, even a less experienced or less trained teacher, could be effective. If a school, however, lacks or fails to harness this capital, even a well-trained teacher joining this environment is unlikely to succeed. It is because "the most powerful of influencing factors on individual teachers' professional practice is likely to be their peers; that is, the social milieu of the school, its norms and influential colleagues' established and accepted norms of practice" (Dimmock, 2014, p. 49). As Opfer and Pedder (2011a) maintain, similar to individual teachers, schools also have their collective beliefs and practices about teaching and learning, and PD should address those aspects and organisational capacity instead of focusing on individual teachers (Newmann, King, & Youngs, 2000).

2.6 Synthesis of PD Models

Although the scholarly work presented above portrays a growing argument for grounding teacher development activities in the workplace, it may not be assumed that PD must always be school based. A significant issue related to school based models is that they are considered to be among the most expensive approaches to PD as they require extra resources (Wayne, Yoon, Zhu, Cronen, & Garet, 2008) and, thus, not every school can afford these models. However, this

argument has been debatable among academics. Some scholars, for example, Brown and Duguid (1991) consider learning in the context to be less costly arguing that compared with external activities that involve cost and extra resources, workplace learning activities can be designed using the resources available in the context. For instance, a school may not afford sending a teacher to attend an external workshop since it involves cost. Teacher development activities, on the other hand, may be organised in the workplace availing the expertise of the school teachers and using other school facilities.

However, researchers have identified many factors, for example, time and workload factors which restrict teachers' potential to benefit from the school-based learning models (Lohman, 2000; Nawab, 2011). These authors have revealed that in some contexts, especially in the developing countries, there are limited teachers in schools who are unable to spare time for school-based learning activities given their workload. Secondly, all schools and teachers need not necessarily possess the capacity to improve their practices without external support and guidance. It has been argued that schools that lack the knowledge and skills to address their pressing problems require support from external experts (Holloway, 2000; Nawab, 2014). Timperley (2008) also supports this view arguing that the support of external expertise is required "because substantive new learning requires teachers to understand new content, learn new skills, and think about their existing practice in new ways" (p. 20). Without accessing knowledge from external sources, the learning of teachers will be limited to the experiences of the teachers inside a school. Cordingley, Bell, Isham, Evans, and Firth (2007) found that in the studies they reviewed, external specialists contributed to teachers becoming familiar with new theoretical and evidence-based knowledge about teaching and learning. Similarly, Guskey and Yoon (2009) revealed that, surprisingly, the studies that indicated a positive relationship between PD and student achievement involved workshops.

Consequently, the traditional models are still in practice on a large scale (Kooy & van Veen, 2012), especially in developing contexts where teachers are frequently expected to single-handedly implement reform initiatives.

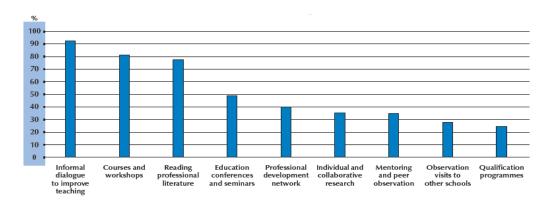


Figure 2.3 Participation rates by type of PD activity (2007-08), international averages

The international average of participation rates by type of PD activity (OECD, 2013) as presented in Figure 2.3 above also indicates that courses and workshops are the second highest common models of PD across the globe. These findings suggest that traditional models have their own importance and, as it has been argued, both traditional and reform models together have something to contribute to the learning of teachers (Guskey, 2003b; Lustick, 2011). An effective strategy for PD of teachers, therefore, is likely to be what Hawley and Valli (2000) maintain:

While most professional development should be school based, educators also need to enrich this learning with new ideas and knowledge gained from sources beyond the school. Innovation is constrained if informed only by those who share similar ideas and experiences. (p. 3)

The scholarly literature on the models of PD raises a significant question regarding the approaches toward PD of teachers in rural Pakistan. What models (training or reform oriented) are dominant in this region and why? Since no research has been conducted in the research region using the traditional and reform lenses of PD, the dominant models that are in practice in this region are not known. Although experience and some case studies of individual schools (Nawab, 2011, 2014) suggest that schools lack cultures and structures to support reform or innovative models of PD, the findings may not be generalised to the whole region. This research collects and analyses data from a variety of stakeholders across the region to understand their experiences of PD.

Although, the recent trend is grounding teacher development activities in the work context using reform and innovative models, some scholars continue to argue that PD is effective owing to its characteristics, not form or type. The following section analyses this debate on the characteristics of effective PD.

2.7 Characteristics of Effective Professional Development

Since PD is a complex process, every activity aiming at developing teachers may not be universally effective. Whether designed by external developers or grounded in the school context, scholars believe that to be effective and worthwhile, any PD programme has to have certain characteristics regarding its design. Desimone (2009) argues that the effectiveness of a learning programme is determined by its features; not type or process. A traditional model may contain features of reform models and vice versa. As Penuel, Fishman, Yamaguchi, and Gallagher (2007) state, "a workshop can be designed using reform-oriented principles and a coaching relationship can be traditional" (p. 928). Similarly, some scholars argue that reform models need not necessarily result in positive outcomes. For example, Garet et al. (2001) found that the selection of either traditional or reform activities have no direct effect on the outcomes of teachers' practices, "Rather, the effect of reform versus traditional professional development

activities operates indirectly through the other design features and dimensions of quality" (p. 935). Therefore, Desimone (2011) suggests focusing on the common features of PD while assessing its quality. This complex scenario has led academics to propose, research and validate common features of PD.

Although there are several models of effective PD, because of two major reasons, the following discussion on the features of effective PD is based on the model of Desimone (2009, 2011). Firstly, Desimone reports a consensus on at least five basic features of effective PD that are linked to enhanced teaching practices and student outcomes. Secondly, these features have also been identified through a series of studies in relation to Eisenhower Professional Development Programme that examined the effects of PD on improving classroom teaching practices (Desimone, Porter, Garet, Yoon, & Birman, 2002; Garet et al., 2001; Porter, Garet, Desimone, Yoon, & Birman, 2000). These features include content focus, active learning, coherence, long duration, and collective participation.

2.7.1 Content Focus

Content focus is the extent to which an activity concentrates on enhancing teachers' knowledge of the subject matter. Although Desimone and her colleagues use the word 'content' only, the term also implies pedagogical content knowledge (Shulman, 1986) because while discussing content, they also refer to how students learn the subject or how teachers need to present the subject matter to the learners. Support for focusing content comes from a bulk of studies (Bransford et al., 1999; Darling-Hammond et al., 2009; Garet et al., 2001; Givvin & Santagata, 2011; Ingvarson, Meiers, & Beavis, 2003; Soine & Lumpe, 2014). Research suggests that the focus of PD should be particular content that students are anticipated to learn as well as the problems that might arise in teaching those content and the strategies that could address the expected problems (Hawley & Valli, 2000). Similarly, Bransford et al. (2005) maintain that "teachers need opportunities to wrestle with and think about how students learn concepts of ratio in mathematics or strategies for composing a persuasive essay in language arts" (p. 404). According to them, focusing only on general pedagogy, for example, information about how to use cooperative learning may not result in improved practices.

The Garet et al. (2001) study emphasises the importance of subject matter focus in designing quality PD activities. The authors argue that focus on subject matter leads to achieving other features of effective PD. A programme that "focuses on academic subject matter (content), gives teachers opportunities for "hands-on" work (active learning), and is integrated into the daily life of the school (coherence), is more likely to produce enhanced knowledge and skills" (Garet et al., 2001, p. 395). Accordingly, PD that focuses content knowledge has greater possibility to incorporate other features of PD. Similarly, based on the review of the literature, M. Kennedy (1998) and Guskey and Yoon (2009) found that programmes that focused on pedagogical

content knowledge demonstrated greater influence on student learning. Consequently, it is believed that a content focus is a feature that significantly contributes to making PD effective. The PD programmes that focus only on pedagogy fall short of this ideal (Bransford et al., 1999).

2.7.2 Active Learning

Active learning is another important feature of effective PD that has generally been agreed upon (Bayar, 2014; Garet et al., 2001; Givvin & Santagata, 2011; Ingvarson et al., 2003; Soine & Lumpe, 2014). Active learning often differentiates reform activities of PD from the traditional ones. Unlike passive learning that involves only listening to lectures, active learning is interactive and engaging such as observation of teaching, modelling, demonstration, feedback and discussions (Desimone, 2009; Saunders, 2014). Active learning activities expose teachers to the 'pedagogies of enactment' (Grossman, Hammerness, & McDonald, 2009), the activities which teachers will use with their students (Givvin & Santagata, 2011). Darling-Hammond, Hammerness, et al. (2005) found that what enabled teachers was their exposure to "the concrete, specific, and practical suggestions for how to enact the theories, which they could immediately seek to apply in practice" (p. 403). Similarly, Bransford et al. (1999) have established that when teachers are afforded with opportunities to test a certain idea and to observe its consequences, they understand how it works with students. Thus, the effective way is to integrate theory and practice instead of simply teaching theories without providing examples and models to guide the teachers in translating the theories into practice (Hammerness, Darling-Hammond, & Bransford, 2005; Timperley, 2008).

Another principle of active learning is engaging prior assumptions and knowledge of teachers as discussed in the section on Adult Learning Theories. Darling-Hammond, Hammerness, et al. (2005) believe that prior knowledge needs to be the starting point for new learning. Teachers have preconceptions, beliefs, assumptions and experiences about teaching and their new learning happens if those preconceptions are challenged by demonstration of alternative practice (Dadds, 2014; Darling-Hammond, Hammerness, et al., 2005; Hammerness et al., 2005; Opfer & Pedder, 2011b; Timperley, 2008). Otherwise, teachers are most likely to dismiss the new ideas, or they will revert to their previous assumptions even if they develop new skills. Consequently, teachers engaged in active learning activities not only deepen their understanding but also equip themselves with practical ideas to be implemented in classroom.

2.7.3 Extended Duration

The effectiveness of PD has been associated with the programme having an extended duration: greater numbers of contact hours stretching over a longer period (Bayar, 2014; Desimone, 2009, 2011; Garet et al., 2001; Guskey, 2000; Saunders, 2014). Although research has not shown precisely what extended duration means or exactly how long a PD programme should last, there

is support for 20 hours or more contact time during a semester (Desimone, 2009). One of the critiques on external workshops is that they fall short of this ideal. In contrast, reform models of PD are longer in duration and as a result they produce a better outcome (Garet et al., 2001). Since reform models of PD are usually situated in the work context, they are sustained over a period compared with external, one-time events. However, it is the duration, not the form or type that makes PD effective. Even the traditional forms, such as workshops, are considered to be effective if they are longer in duration (Birman, Desimone, Poter, & Garet, 2000).

It has also been revealed that teachers of high performing schools participate in PD activities involving longer duration and collaboration (Opfer & Pedder, 2011a). In contrast, teachers in the low performing schools participate in PD activities that are brief. Consequently, whether a traditional or reform type, PD having sufficient contact time has a positive impact upon teachers' practice and is, therefore, effective.

2.7.4 Coherence

Coherence, another agreed feature of PD, is how the learning experiences are built on what teachers already know and how well aligned they are with the national and local standards for student learning (Birman et al., 2000; Desimone et al., 2002; Garet et al., 2001). These authors have found that activities aligned with the knowledge and beliefs of teachers as well as with the reforms and policies of the school, district and state promote change in teaching practice.

Coherence also encompasses the goals of schools and the strengths, interests and needs of teachers. It has been argued that when the learning experiences are related to school goals, it motivates teachers and enhances their commitment (Hunzicker, 2011). Similarly, one of the qualities of learning opportunities for Bransford et al. (1999) is the 'learner-centered environments', an environment that builds on the interests, needs and strengths of the learners. The effectiveness of PD is determined by "teachers' own judgment about how coherent a programme is with their personal professional goals and their goals for their students' learning" (Penuel et al., 2007, p. 952). Cameron, Mulholland, and Branson (2013) found that teachers want "learning to be relevant to what they were doing in their classrooms" (p. 388). Similarly, Bayar (2014) also revealed that teachers considered those PD activities effective that match to their existing needs. It suggests that one of the significant features of PD activities is their alignment with the needs and realities of teachers. The school setting of teachers, the curriculum and the level they teach, as well as their career paths and backgrounds should be considered while designing PD opportunities.

2.7.5 Collective Participation

Desimone (2009) believes that there is also consensus on collective participation as one of the critical features of effective PD. She states that collective participation can be attained through

enabling teachers from the same school, grade or department in PD programme. One of the purposes of enabling collective participation is to build an interactive learning community (Desimone, 2011). Similarly, Garet et al. (2001) attach many other benefits to collective participation. They state that:

First, teachers who work together are more likely to have the opportunity to discuss concepts, skills, and problems that arise during their professional development experiences. Second, teachers who are from the same school, department, or grade are likely to share common curriculum materials, course offerings, and assessment requirements. By engaging in joint professional development, they may be able to integrate what they learn with other aspects of their instructional context. Third, teachers who share the same students can discuss students' needs across classes and grade levels. (p. 922)

This feature of PD is supported by 'situatedness' of learning or the concept of communities of practice (Lave & Wenger, 1991) which advocate that learning is more than an individual activity. It happens when individuals come together, question, discuss and argue. Bransford et al. (1999) also agree that a significant quality of learning experiences is 'community-centered environment', which encourages collaboration.

A positive relationship among the above core features of PD has also been reported in various studies. Accordingly, one feature supports or facilitates the other, and collectively they result in increased knowledge and skills and improvement in classroom practices. Porter et al. (2000) revealed that PD activities having a longer duration and encouraging collective participation "tend to place more emphasis on content, provide more opportunities for active learning and provide more coherent professional development than other activities" (p. 27). Similarly, Garet et al. (2001) found that collective participation and long duration supported active learning, coherence and a content focus suggesting that these features are interdependent. The absence of one feature affects the functions of the other features. To be effective, a PD programme should have all those features.

2.8 Lack of Evidence to Support Consensus

Although literature presented above illustrates a potential consensus on five features of effective PD, there are other scholars who have identified that the characteristics of effective PD are inconsistent and contradictory (Guskey, 2003a; Penuel et al., 2007; Rogers et al., 2007). Guskey (2003a) listed 21 characteristics of effective PD cited in various sources and concluded that there is little agreement regarding the criteria for effectiveness in PD. The criteria "vary depending on the intended audience [and effectiveness] like beauty, is in the eyes of the beholder" (p. 14). Guskey also notes that in PD research there are 'yes' and 'but' statements which make the existing knowledge doubtful for those practitioners who want simple answers about effective PD. Moreover, there is a lack of valid evidence to show a relationship between the identified features of PD and improvement in practices or students outcomes. Soine and

Lumpe (2014) found "no evidence to suggest that there is a meaningful association between characteristics of professional development and teacher practice" (p. 322). Similarly, Opfer and Pedder (2011b) wonder why teachers do not improve their practices despite attending PD having all the features of effectiveness and why in some cases teachers learn when they attend PD that lack the identified features. These authors conclude that we are unable to predict learning based on the seeming characteristics of PD.

Consequently, many respected academics believe that the existing evidence regarding characteristics of effective PD is weak and we should not assume that we have research evidence and theory based knowledge upon which to base PD (Saunders, 2014; Wayne et al., 2008). Although the seeming core features of PD have been identified, the lack of consistency in these features, as well as the absence of their replication across contexts, makes the findings of existing research less impactful (Kooy & van Veen, 2012; Opfer & Pedder, 2011a; Wayne et al., 2008). We still know very little about the complex systems where teachers try to implement their learning. Since various models are implemented in different contexts with diverse goals, generalising the models and their characteristics is questionable (Saunders, 2014). While synthesising findings on PD, we have to keep in mind the context of those findings (Penuel et al., 2007) and to avoid generalisation of rules and standards in teacher education (Gray, 2010). Therefore, as Opfer and Pedder (2011a) maintain:

if the goal is to explain and predict effective teacher learning and teacher pedagogical change, we must first expand our causal assumptions about the features of professional development by recognizing that features may collectively work together in different ways under different circumstances in different contexts. (p. 386)

2.9 Influence of Context in PD

Context has been identified as one of the most influencing factors determining the processes and features of PD. As Saunders (2014) argues, "when it comes to professional development one size definitely doesn't fit all" (p. 180). There are traditions, cultures, policies and school related conditions that vary from context to context. These background factors have implications for the learning needs of teachers and PD programmes (Avalos, 2011). Avalos believes that what is relevant in a Namibian study may not be the same in Canada. A teacher from Canada may not need to start from the same point where some Namibian teacher starts her professional learning.

Guskey (2003b) maintains that a programme with a focus on content and pedagogical knowledge will be more relevant for teachers in lower income areas who are unable to attract well-qualified teachers. Well qualified teachers in affluent communities may not benefit from the similar programme. On the other hand, teachers in some developing countries have access to outdated pre-service programmes who hardly bring any practical ideas to be implemented in

their classroom (Siddiqui, 2007; UNESCO, 2011). Such teachers may also require knowledge of pedagogy. If we consider focus on content as the core feature of PD, the needs of those teachers may be ignored.

Similarly, teachers' needs vary based on their level and career stage. The learning needs of novice teachers are different from their experienced counterparts (Timperley, Wilson, Barrar, & Fung, 2008). A design fit for novice teachers, therefore, may not be of the same value for experienced teachers (Easton, 2008). While surveying the perceptions of experienced teachers, Lustick (2011) found that the contents such as general pedagogy and classroom management were considered 'redundant' and 'unnecessary' by those teachers. Instead, they valued the experience of curriculum development since it enabled them to consider the learning outcomes of students and to identify strategies to achieve those outcomes. Consequently, as Rogers et al. (2007) have argued, the most effective feature of PD for teachers is the 'classroom applicability', i.e. the practical application of the learning.

Moreover, the expected learning outcomes for students as well as the nature of teachers' autonomy will also have a significant influence on PD programmes. Teachers in schools of less developed nations have restricted professional learning choices. Such teachers are expected to teach basic Maths and literacy to students who "learn not to create knowledge, develop ingenuity or solve unfamiliar problems in flexible formats. Their destiny is to be literate and numerate enough to serve and support the 'weightless work' of their affluent superiors" (A. Hargreaves, 2002, p. 10). Likewise, in schools of developing world, students are mostly expected to rote learn and reproduce their learning in the tests. Educating teacher on engaging learners in critical thinking and problem solving, although very important, may not be relevant in those situations. It suggests that the contextual realities in some countries necessitate a deficit view of teacher education.

In addition, the concept of professional learning communities will work in affluent systems with high capacity teachers. This concept may not work in a low capacity system where teachers are uncertified and unskilled (A. Hargreaves, 2002). In some developing countries, there is limited teaching staff in schools; thus, some approaches to teaching are just not feasible. Furthermore, the concept of learning communities would flourish in a context where teachers openly critique the ideas of one another. This concept may not work in a culture where the differences of opinion are considered a threat to group harmony or where it is disrespectful to disagree with someone such as in some Asian countries (Nguyen, Elliott, Terlouw, & Pilot, 2009).

Moreover, learning in the work context will be possible if the teachers have enough knowledge of the profession. However, if teachers lack capacity, their learning will be limited to the experience of the group (Hoban, 2002). For teachers in those systems, the traditional model may be more relevant to connect them to the knowledge base.

On the other hand, it is important to note that PD effectiveness is not limited to only what happens in a workshop. There are many factors at school level that influence teachers' effort to put theory into practice. As Saunders (2014) opines:

Professional development is not confined to what occurs in a workshop or on a course, but rather is what happens when teachers attempt new practices and processes in their work. Teachers necessarily negotiate a host of variables as they enact new practices and processes. Some of these include student behaviours and abilities, relationships with colleagues, school climate, availability of resources and competing policy imperatives. (p. 167)

Teachers require a support mechanism and collaborative culture in school to successfully trial and sustain new learning. Support of management and school leadership (Nicolaidis & Mattheoudakis, 2008), respecting and valuing the expertise of teachers who are engaged in PD (Pyle, Wade-Woolley, & Hutchinson, 2011), a sense of security to try something new (Guskey, 2002), collegiality and collaboration among staff (Grimmett & Crehan, 1992), feedback from a variety of sources (Nicolaidis & Mattheoudakis, 2008), and availability of adequate resources (Seçer, 2010; Yuen-Kwan, 1998) have been identified as contextual factors that facilitate the teacher to implement the new learning. Coupled with the lack of these support mechanisms, the time constraints and workload of teachers restrict teachers' implementation of new ideas (Guskey, 2002; Nawab, 2017; Nicolaidis & Mattheoudakis, 2008; Ramatlapana, 2009; Saunders, 2014; Yuen-Kwan, 1998). Moreover, the beliefs and attitude of the trainee teachers and the beliefs of their peers have been found to be the major factors in the success and sustainability of innovations (Bissaker, 2009; James & McCormick, 2009; Sheridan, 2013). Since all these factors have a significant impact on introducing innovations in schools, labeling PD effective or otherwise owing to its type or features seems a less careful approach. Consequently, as A. Kennedy (2017) in a recent editorial to the Journal of Professional Development in Education, concludes:

it is clear that yet again, cultural, and indeed political factors influence strongly what is deemed to be necessary or worthwhile in terms of evaluating the success of professional learning. This is an important topic worthy of international comparison and debate. (p. 691)

2.10 Aligning PD with Real Needs of Teachers

The literature presented above shows a growing consensus that teachers in various contexts have diverse needs, challenges and realities. These contextual realities make the existing knowledge on PD difficult to generalise across contexts. We still need to answer basic questions such as, the comparative impact of various interventions, the types of PD needed and the relative importance of various features in diverse contexts (Desimone, 2009). We also need to

learn about the applicability of various models in different contexts and most importantly, about the effective approaches to PD in low-income countries (Swaffield, 2014). Consequently, we need to carefully design the future of teacher education instead of uncritically continuing current trends (Aubusson & Schuck, 2013).

However, it is unfortunate to note that despite the lack of evidence, a seeming consensus regarding the effectiveness of PD is promulgated, and efforts are made to generalise them across contexts. Guthrie (2014) laments that without any cross-cultural validation, teaching methodologies are transferred from 'developed' to 'developing' countries. Even teacher trainers from developing countries who visit rich countries bring back and try to implement 'indigestible' ideas without considering the level and needs of teachers in the host countries (McLaughlin, 1996). A. Kennedy (2014a) challenges this approach arguing that "it is simply not sufficient to identify high-performing countries and to seek to replicate key aspects of their policies without understanding first what our own particular 'problems' are and without understanding why particular solutions might work" (p. 696). Scholars suggest that, instead of passively receiving the imported theories, practitioners should demand better evidence from the change agents and question them concerning the trustworthiness, applicability and similarity of the particular idea to the host organisations (Guskey & Yoon, 2009).

Some scholars argue that the externally developed and imposed standards will have a limited impact on the PD of teachers; rather they will cause frustration (Hilton, Flores, & Niklasson, 2013). Research suggests that teachers fail to see any connection between externally determined materials and school realities (Smyth, 2013). The reason is that outsiders may not be informed by the needs and realities of teachers. When interventions fail, it is often because outsiders have made the determination regarding the goals, processes and content without considering teachers' learning needs (Flores, 2005; Mohammed & Harlech-Jones, 2008; Postholm, 2012). To make interventions successful, PD should be locally constructed and aligned with the needs of teachers (Darling-Hammond & McLaughlin, 2011; Gatlin, 2009; Hill, Beisiegel, & Jacob, 2013) and be attentive to the demands on teachers and the possibility to meet those demands given the contextual and school conditions (Penuel et al., 2007). Otherwise, we do no service to teachers if we do not connect "learning to other contextual influences on their teaching" (Adoniou, 2013, p. 55). If the material is not relevant and useful, there is no benefit for teachers (Phillips, 2008).

To conclude, the analysis of the literature on PD of teachers as presented in this chapter raises many significant questions for PD of teachers in rural Pakistan. Firstly, PD is a form of adult learning and adult learning has certain unique principles which those designing and delivering PD programmes should consider in order to provide teachers with effective learning experiences. A question arising against this background is whether PD providers in rural

Pakistan consider these principles while designing and implementing their PD programmes. Secondly, PD may be transmissive where teachers are transmitted or dictated certain strategies from above to implement in the classroom as part of certain reform initiatives. Alternatively, PD may be transformative where teachers are given increased autonomy to decide on what they need to learn and how they can learn. Since no research has been conducted on PD in rural Pakistan, little is known about the dominant models of PD on offer in this region. Thirdly, literature on PD of teachers shows an increased trend to ground teacher development activities in the workplace given that the traditional models of PD are remote from contextual realities of teachers. Whether PD models in rural Pakistan are informed by these reform or innovative models of teacher development is another significant question requiring immediate response. Lastly, educational literature demonstrates a consensus on certain features of PD arguing that PD is effective owing to its features, not design or form. we do not know, however, what of those effective features the existing PD on offer for teachers in rural Pakistan contain.

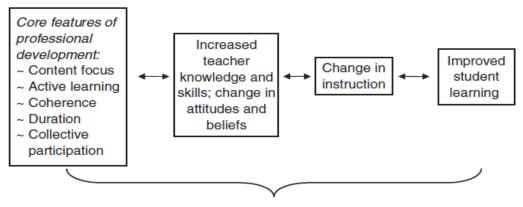
The most critical debate regarding PD for teachers disregards the claims of effective models, forms and features focuses on the issue of context. As shown in the discussion on the 'Influence of Context in PD', the scholarly literature on PD of teachers reviewed for this research indicated a disagreement among academics concerning the criteria of effective PD. Many researchers agree that different contexts have their unique realities, which bring different implications for PD of teachers. It may be that a transmissive or traditional model of PD could be effective for teachers in rural Pakistan given their contextual realities. Stakeholders in this region, however, may disregard some of the agreed features owing to their unique realities and may suggest different features based on their real experience. This matter, however, has been largely unexamined in Pakistan, especially in the rural context where the PD providers have been implementing western generated models without considering the contextual realities and needs of teachers. Despite frequent calls to involve key stakeholders in design and delivery of PD, academics have paid surprisingly little attention to PD of teachers in rural Pakistan and consequently, literature remains remarkably unhelpful in answering what stakeholders in rural Pakistan value and what works for them given their unique context. The current research addresses this gap and examines what makes PD effective for key stakeholders in rural Pakistan with the assumption that listening to their views will be highly significant in designing quality PD for teachers.

2.11 Conceptual Framework

In educational research, a wide range of frameworks and models have been suggested and tested to research PD of teachers (see, for example, D. Clarke & Hollingsworth, 2002; Evans, 2014; Guskey, 2000; Ingvarson et al., 2003; King, 2014; Opfer & Pedder, 2011a; K. Patton, Parker, & Tannehill, 2015; Postholm, 2012; Timperley & Alton-Lee, 2008). In line with the

reflection of Boylan, Coldwell, Maxwell, and Jordan (2017) that different PL models have different emphases and purposes, these frameworks were not entirely relevant to use as a diagnostic and analytical lens in this research, for example, Guskey (2000) focus on evaluating impact or understanding the process of change. Guskey locates 'change in the attitude/beliefs of teachers' at the end of the hierarchy claiming that teachers change their attitude/beliefs after observing change in the outcomes of students. Following this model implies that enhanced student achievement should be evaluated before appraising any change in the attitude of teachers. Given the time constraints, evaluating the impact of PD on student outcome was beyond the scope of this research.

Others, for example, K. Patton et al. (2015) focus on simply features of PD having less space for the influence of context. Likewise, some frameworks give more space to outcomes of PD giving less space to its features and context such as that of Timperley and Alton-Lee (2008). On the other hand, this research aimed at understanding what key features the key stakeholders attribute to PD, how those features contribute to enhanced knowledge and skills of teachers and what contextual conditions influence those features and outcomes. This purpose of the research necessitated a framework having space for features of PD, outcomes of PD and the contextual factors influencing the features and outcomes of PD. In this context, the conceptual framework for studying PD of teachers presented by Desimone (2009) was found the most appropriate and relevant to be used as a diagnostic and analytical lens for this research. Figure 2.4 below represents the conceptual framework adopted from Desimone (2009).



Context such as teacher and student characteristics, curriculum, school leadership, policy environment

Figure 2.4 Conceptual framework adopted from Desimone (2009)

This framework assumes that there are certain core features that make PD effective. Aligned with this assumption, data collection focused on the features that make PD effective for stakeholders in the specific research context. The framework also indicates that the presence of these features leads to enhanced knowledge, skills and attitude of teachers. These changes will facilitate improvement in the instructional practices which will ultimately result in improved

student learning. Following this assumption, data collection focused on how existing PD contributed to the enhanced knowledge, skills, attitude and practices of teachers. Given the time and resource factors, improved student learning was not the focus of this research. The framework, finally, shows that the features and outcomes of PD are influenced by the contextual conditions such as characteristics of teachers and students, curriculum, leadership and policy environment. In line with this component of the framework, data collection focused on the contextual conditions that influence the features and outcomes of PD in the research context. Thus, using Desimone framework, the intention was to elicit from the key stakeholders:

- a) what they perceived to be the features of effective PD keeping in view their context and needs,
- b) what of those features were present or otherwise in the programmes they have attended,
- c) what learning resulted from their participation in PD,
- d) how it was implemented and
- e) what contextual factors influence the features of PD and the process of implementation.

Together, these questions responded to the overarching question: what makes PD effective for teachers in this particular region, rural Pakistan?

2.12 Conclusion

This chapter commenced with a focus on teachers' professional knowledge, describing how the constantly changing demands from schools force today's teachers to acquire new knowledge, skills and dispositions which they were not expected to possess in past decades. Then the meaning of PD was presented highlighting how PD refers to a variety of formal and informal learning activities. Next, various PD models and their underlying assumptions and purposes, ranging from training to innovative models, were outlined. The differences between the two views is that one is about knowledge and skill acquisition and the other is perceives it to be a set of processes that enable them to engage in reflection on their practices and the development creative and innovative ways of thinking. The analysis of these models revealed that there is a growing trend towards the innovative models and to situate teacher development activities in the work context. The features of PD were then presented, highlighting that PD is effective because of certain features rather than by its form or type. It was also shown that there is a lack of agreement in the seeming core features of PD. This debate led to consideration of the influence of context in PD. Where context differs, it brings different implications for the needs of teachers, which consequently influences the design and features of PD. It was concluded that the existing evidence is limited to generalise knowledge on PD of teachers across contexts and, therefore, we need to further investigate the relative importance of different features in different contexts.

The importance of involving teachers in designing PD was highlighted at this stage. Finally, a conceptual framework was also presented that was used as a diagnostic and analytical lens for this research.

The next chapter will present the research methodology used to generate an understanding of what makes PD effective for teachers in rural Pakistan.

3. METHODOLOGY

3.1 Introduction

This chapter describes the research methodology and methods. It starts with the research design describing the paradigm, research approach, research method and framework for the collection and analysis of data. Then the chapter moves on to present the setting, samples and data collection tools and procedures. Next, the process and procedures of data analysis are described. The chapter also includes ethical considerations of the research and concludes with a framework for presenting research findings.

3.2 Research Design

A research design is about formulating guidelines that connect paradigms to research approaches, methods of data collection, participants and other relevant materials (Denzin & Lincoln, 2000). Choosing the most appropriate and relevant method for research is important in the sense that readers can be convinced about the validity of the conclusions if they are soundly based (Walliman, 2010). To conduct this research, the researcher used a qualitative approach to a constructivist-interpretive epistemology. Following on this methodological stance the research methods employed were case studies and grounded theory. The detail on these perspectives and rationale for their selection are presented below.

3.4 Epistemological Paradigm: Constructivist-Interpretive

Research paradigms define the nature of inquiry for researchers. There are three dimensions of a research paradigm, namely, ontology, epistemology and methodology. Ontology refers to the nature of reality and what might be known about reality. Epistemology is about the nature of the relationship between the researcher beliefs and what can be known. Methodology, on the other hand, specifies approaches for a researcher for studying what he or she believes can be known (Blanche & Durrheim, 1999).

A distinction may be made between some paradigms based on their approach to the nature of reality and methods of understanding reality. For example, reality for a post-positivist is external to the human mind and for interpretivist it is socially constructed (Willis & Jost, 2007). Similarly, the purpose of research for a positivist is to find universals whereas for interpretivists research aims to achieve deeper understanding. In addition, positivists stress upon objectivity and search for generalisable facts while interpretivists concede some degree of subjectivity (Atkins & Wallace, 2012). Within educational research, there is an increasing tendency to ground it into non-positivist epistemological perspectives (Howe & Eisenhart, 1990).

There are numerous choices within non-positivist paradigms. For example, while listing major paradigms and their basic beliefs, Lincoln and Guba (2000) did not refer to 'Interpretivism' as a paradigm, rather they attribute the beliefs of Interpretivism to constructivism. Similarly, Denzin and Lincoln (2000) used the term constructivist-interpretive since they consider constructivist and interpretive to be different terms used for the same paradigm. For Walliman (2010), interpretivism, idealism, constructivism or even constructionism fall under the umbrella of relativism. Likewise, Schwandt (2000) believes that the interpretivists and constructivists do not have distinguishable foundations except they both demonstrate a shift from positivism. Some others (for example, Neyland, 1992) combine interpretivism with hermeneutics to form one major paradigm of inquiry, while, Willis and Jost (2007) treat hermeneutics, not as a paradigm rather as a framework for data collection and analysis. These authors conclude that many paradigms and frameworks differ from others more in their origins than anything else. Given the simultaneous existence of diverse paradigms, a researcher may draw on more than one paradigm (Blanche & Durrheim, 1999).

To choose a paradigm among these dilemmas, I relied on my own beliefs and the purpose of the research (teleology). My acquaintance with the literature on social learning theories (Blackler, 1995; S. Brown & Duguid, 1991; Cook & Yanow, 1993; Elkjaer, 1999; Lave & Wenger, 1991) has led me to believe that knowledge is not a fixed entity to be transferred across contexts. It is, rather, situated and can be constructed. My experience of working with teachers also suggests that teachers have the capacity to create contextual solutions for their emerging issues. I agree with the perspective that if teachers are given an opportunity, "they can generate new ways of thinking about teaching and learning and develop new practices in line with new ways of theorising their work" (Bissaker, 2009, p. 57). Given my beliefs and background factors, the constructivist and intepretivist paradigms held more relevance for me to use as lenses for this research.

Coupled with my own background and beliefs, the purpose of my research was another factor in determining a paradigm. One of the significant standards of research is that the "methodology must respond to the different purposes and contexts of research" (Howe & Eisenhart, 1990, p. 5). The purpose of my study was to understand what makes PD effective for stakeholders in a particular context. It was assumed that the characteristics of effective PD as reported in the literature from other contexts might not be equally applicable to the research context. I was interested in understanding and interpreting what characteristics the stakeholders attach to PD based on their experiences of being involved in such programmes. It was also assumed that they would provide insights based on their experience of what works for them. Consequently, through closely interacting with the participants in their natural setting and actively listening to them, the research aimed at developing a theory of effective PD for that particular context. These factors accurately placed me in the constructivist-interpretive paradigm (Denzin & Lincoln,

2000). The constructivist and interpretive perspectives and their relationship are briefly explained below.

Constructivists believe in the social construction of knowledge. Denzin and Lincoln (2000, p. 21) account that "Constructivist paradigm assumes a relativist ontology (there are multiple realities), a subjectivist epistemology (knower and respondent co-create understanding), and a naturalistic (in the natural world) set of methodological procedures". Since our history and cultural context shape our world, there is no objective reality (Mills, Bonner, & Francis, 2006). Support for this interpretation also comes from Annells (1996) who believes that the knower is subjectively linked to what can be known. A researcher not only interprets the world but also actively participates in its social construction (Walker & Dimmock, 2000).

In line with the constructivist perspective, the interpretivists believe that human actions take place within a structure of social rules (Connole, 1993; Schwandt, 2000). The researcher's task is to understand what is happening and to critically explain or analyse the action and situation through being actively involved in the process of negotiated meaning. Reality for interpretivists is socially constructed and the role of a researcher is not to discover universal laws, rather to understand the local context (Willis & Jost, 2007). Whether the theory developed may be applicable in similar settings or not is up to the readers.

Aligned with the constructivist and interpretivist perspectives, I believe that the theory of effective PD is not universal. Different contexts have their own unique realities which can be brought to the surface by actively listening to the experiences of real stakeholders. The role of the researcher is to work with stakeholders in their natural context to construct and interpret the contextually relevant knowledge. Therefore, I used a constructivist-interpretive lens for my research.

3.5 Research Approach: Qualitative

Once I determined the epistemological perspective for my research, it was natural to turn to a qualitative approach as it shares proximity with interpretivist and constructivist paradigms. The purpose of qualitative research is to explore and understand the specific phenomenon in natural settings in terms of the meaning people bring with them (Bogdan & Biklen, 1998; C. Cronin, 2014; Denzin & Lincoln, 2000; Hancock, Okleford, & Windridge, 2007). This type of research is "about persons' lives, lived experiences, behaviours, emotions, and feelings" (Strauss & Corbin, 1998, p. 11). Qualitative researchers do not enter the study with hypotheses and search data to test them. Rather they inductively develop theory from data through a bottom up approach (Bogdan & Biklen, 1998). These authors further assert that instead of a quick visit to a setting or brief talks with a handful of participants, qualitative researchers spend sufficient time in the field collecting and analysing extensive data. They scratch, penetrate the surface and go deeper (Eisner, 1991).

One of the major reasons for choosing a qualitative research is the nature of the research problem (Strauss & Corbin, 1998). By applying the above perspective of qualitative research to the nature and purpose of my study, I could see that I required an in-depth exploration of the phenomena of PD in the rural context of Pakistan. For this purpose, I needed to personally visit the natural setting, interact with the participants, collect extensive data, use a variety of data collections tools and analyse the data inductively to develop a theory of effective PD for that particular context. Moreover, qualitative research also provides an opportunity to draw on data to make modifications to the initial plan of inquiry and it was anticipated that some changes may occur in this research to ensure stakeholders' voices are prioritised in shaping a theory of PD in the context of rural Pakistan. Consequently, a qualitative approach was very much relevant based on the purpose of the research.

3.6 Case Study Method

Starting from the bigger picture, when I further narrowed down my research I had to decide on a research method which refers to practical procedures used to generate and analyse data (Birks & Bills, 2011). Under the umbrella of qualitative approach, there are many methods such as case study, ethnography, ethnomethodology, action research, phenomenology, discourse analysis and historiography (Gale, 1998). Since I adopted an interpretive epistemological stance for this research, case study method appealed to me, similar to other interpretivists who tend to use case study (Willis & Jost, 2007).

Case study is "an intensive, holistic description and analysis of a single instance, phenomenon, or social unit" (Merriam, 1988, p. 21). Accordingly, case study enables a researcher to concentrate on a particular context and case(s) to better understand the phenomenon in depth (Stake, 2000; Willis & Jost, 2007). Aligned with this perspective of case study, I restricted my research to the context, case and phenomenon as shown in Figure 3.1 below.

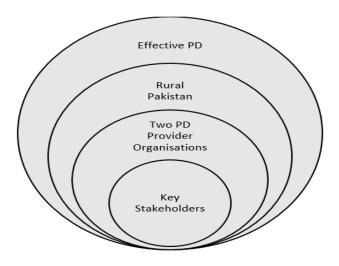


Figure 3.1 Representation of the Case Study Method Used in this Research

As the figure shows, the focus for this research was effective PD of teachers. Given the time constraints and other factors, however, it was not possible to conduct a holistic analysis of multiple cases with regard to effective PD. The case that was selected for this research, therefore, was located in the District Chitral which is a remote rural region of Pakistan. In addition, as rationalised in the introductory chapter (page 10), I was interested in researching effective PD in this particular region recognising that PD of teachers in this region has thus far received little attention although there are several PD provider organisations working on capacity building of teachers in District Chitral. Aiming at an in-depth understanding of the phenomenon, the research was further restricted to PD programmes offered by two PD provider organisations. Finally, the research concentrated on key stakeholders namely teachers, school leaders, representatives of PD provider organisations and education department officials to understand their perceptions of effective PD with a particular focus on the PD programmes offered by the two PD provider organisations. Further details on the research setting, PD providers organisations and research participants are provided on pages 50 to 52.

Using case study approach was helpful in many ways. Firstly, case study enables researchers to capture the real world and interact with real people (Atkins & Wallace, 2012; Willis & Jost, 2007). In the same way, I went to the particular context and captured the real world of teachers and their PD activities through interacting with the most relevant stakeholders such as teachers, school leaders, PD providers and officials of the education department. Based on their experience and views, I developed an understanding of effective PD for the particular context with the assumption that "such an understanding is likely to improve important contextual conditions pertinent to [the] case" (Yin, 2013, p. 16).

Secondly, simply administering a questionnaire to teachers or interviewing a handful of participants would have barely allowed getting a deeper understanding of PD in the research context. Desimone (2011) argues that compared with the past when the quality of PD was evaluated only based on a satisfaction survey carried out at the end of a programme, today we need more rigorous standards of evidence. The case study has such strength as it allowed the researcher to utilise a variety of data collection tools and procedures such as interviews, documents, artefacts and observations (Yin, 2013). Consequently, case study proved an effective method to conduct this research.

3.7 Research Framework: Constructivist Grounded Theory

Whereas the constructivist-interpretive paradigm provided me with the lens to approach the reality and construction of knowledge, and the case study enabled me to focus a particular phenomenon as well as to choose relevant tools for data collection, I required a framework to guide the collection and analysis of data. An ideal framework that fits very well with case study is

grounded theory (Atkins & Wallace, 2012; Sturman, 1999). Developed by Glaser and Strauss (1967), grounded theory represents a methodological shift in social research that opposes the grand theory and deduction and supports the concept of generating new theories from empirical data (Hodkinson, 2008). Strauss and Corbin (1998, p. 24) argued that "theories are constructed, vary in nature, and are not all the same. Regardless of how theories are constructed, each one is unique".

Grounded theory has passed through many generations. Its earlier objectivist versions have been critiqued because of their emphasis on a single reality that a neutral observer discovers (Charmaz, 2000, 2006). Charmaz (2008) presents a constructivist approach to grounded theory, which assumes that reality is multiple and co-constructed by the researcher and researched under various settings and situations. Unlike the positivist and other traditional methods of research, "grounded theorists cannot shop their disciplinary stores from preconceived concepts and dress their data in them" (Charmaz, 2000, p. 511). The theory is grounded in and constructed from data (Atkins & Wallace, 2012; Ezzy; Willig, 2013). Researchers become part of the research and they are not neutral, detached and passive observers. They have prior conceptions that influence and shape the research process. It is unlikely that researchers enter setting without guiding theories "even if they wished" (Sturman, 1999, p. 104). Instead of denying the prior theoretical preconceptions, constructivist grounded theorists subject these influences to rigorous scrutiny and prevent them from narrowing what is observed and theorised (Charmaz, 2008; Ezzy). This approach "fosters researchers' reflexivity about their own interpretations as well as those of their research participants" (Charmaz, 2006, p. 131).

There were several reasons to adopt grounded theory as a framework for the collection and analysis of data in this research. Firstly, grounded theory is congruent in many ways with the constructivist-interpretive paradigm and qualitative approach to research, already chosen for my research. Grounded theory also propagates similar perspectives such as multiple realities, theory emerging from data and researcher being an active part of the research process. As presented in previous sections, my research was also designed based on the assumption that the theories of PD developed in other contexts may not be equally applicable to every context. That reality needs to emerge from the perspectives of the stakeholders involved in PD in the context. Secondly, the researcher remained an active part of the research process and, in line with constructivist grounded theory, the researcher and the researched co-constructed a model of effectively PD for the research region. The process of mutual construction of knowledge has been discussed in detail as a reflection on the journey of using grounded theory (page 164). Thirdly and most importantly, grounded theory provided me with a focused lens and systematic strategies for data collection and analysis. It is this lens that makes grounded theory unique and

ideal, especially for those researchers who intend to inductively generate theory from data. The strategies of grounded theory as advocated by (Charmaz, 2000) include:

(a) simultaneous collection and analysis of data, (b) a two-step data coding process, (c) comparative methods, (d) memo writing aimed at the construction of conceptual analyses, (e) sampling to refine the researcher's emerging theoretical ideas, and (f) integration of the theoretical framework. (p. 510-511)

I collected and analysed data following these strategies which will be described in detail in the data analysis section.

3.8 Setting: District Chitral

Selection of a specific site is necessary to understand a case thoroughly. All relevant events cannot be studied without narrowing the research field (Marshall & Rossman, 2014). The setting for this study was Chitral: a north-western remote rural district of Khyber Pakhtunkhwa Province in Pakistan. Located in the region of Hindu Kush mountain range at the western end of the Himalayas, Chitral is surrounded by high mountain passes, deep green valleys and timeless mountain glaciers. The area of Chitral stretches over 14,850 sq km, making it the largest district of the province. It shares a border with Afghanistan to the north and west and with the rest of Pakistan to the east and south (see location of Chitral in the map of Pakistan, Appendix A). A narrow strip of Wakhan corridor separates Chitral from Tajikistan in the north.

According to a survey report by Pakistan Poverty Alleviation Fund (2015), the total population of Chitral is 479,000 with a literacy rate of 54% (70% for males and 37% for females). Statistics produced by Education Management Information System (2015-16) of Khyber Pakhtunkhwa Government, Pakistan on the total population of school age children and the actual enrollment in schools is shown in Figure 3.2 below.

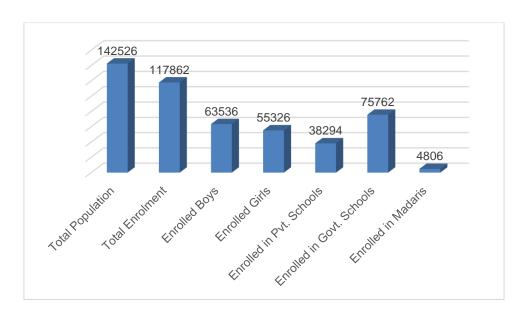


Figure 3.2 Population of age group 5-10 and gross enrolment

The comparison of the total population of students with the enrolled one suggests that there are more than 25,000 out of school children of age groups five to 14. Moreover, the chart shows that there is no significant difference in the number of enrolled boys and girls. In addition, as indicated in the chart, public schools enrol a greater number of students compared with private schools. Around 5,000 children are enrolled in the madaris.

Table 3.1 below shows the number of schools and teachers in the public sector in District Chitral. Such data for the private sector was not available. The table shows a significant difference in the number of schools for boys and girls at primary and high levels. This gap has been filled by the private schools who often operate in those areas where children lack access to public schools. The table also indicates that compared with females, a greater number of male teachers are serving in the public schools.

Table 3.1 Detail of Public Schools and Teachers in District Chitral

Level	Schools		Teachers			
	Boys	Girls	Total	Males	Females	Total
Primary	484	174	658	936	409	1345
Middle	48	39	87	335	254	589
High	55	21	76	727	297	1024
Total	587	234	821	1998	960	2958

In this district, there are four major organisations namely Aga Khan University (AKU), Allama Iqbal Open University (AIOU), Aga Khan Education Service (AKES) and Association for Academic Quality (AFAQ) who arrange in-service PD programmes for teachers. The common experience suggests that these organisations use the conventional external workshop models aiming at shifting teaching practices from traditional to innovative methods with a focus on child-centred pedagogies and conceptual understanding. The duration of their programmes varies ranging from one day to several weeks. There is a lack of uniformity in the duration, content and delivery procedures of the programmes offered by these organisations.

Several reasons were instrumental in selecting this region for the current research. Firstly, due to its remoteness, the quality of education in this region is low and thus needs relatively greater attention. Secondly, due to its geographical importance, the quality of education in this region may have greater implications for the future of the whole region. Thirdly, many NGOs have intervened in this context aiming to work on capacity building of teachers and schools. However, no research has been carried out to document the experience of the key stakeholders in this region concerning the PD programmes on offer. Lastly, I belong to the same region and

expected to gain better and deeper data because of sharing cultural values with them and understanding their language.

3.9 Research Participants

Since the study aimed at an in-depth understanding of the phenomenon, it was important to attract a range of participants with different views and experiences. Therefore, a reasonably large number of participants from a variety of relevant stakeholders, as shown in Table 3.2 below, were recruited for this research. As the purpose of the study was understanding the effectiveness of PD, these participants because of their involvement in PD were the most relevant stakeholders to consult.

Table 3.2 Categories of the Research Participants

Participants	Number
Teachers	28
School Leaders ⁷	12
Govt. Education Officials	4
PD Provider Representatives	5

The first category of participants consisted of those teachers who had attended any PD programme in the previous three years. It was assumed that the teachers who participated in PD would provide more relevant data regarding what makes PD effective and what works for them. It was also presumed that the teachers who have been through PD programmes more than three years ago might not fully recall their experiences.

To recruit in-service trained teachers for this research, participant lists were obtained from the PD provider organisations records of all teachers who attended their programmes in the previous three years. This sampling frame was necessary to make contact with more relevant individuals (Bloor, 2001). The list obtained from the target organisations indicated that on average, each organisation provides PD opportunities to approximately 65 teachers in each year. Thus, the total population of teachers who have attended PD activities during the three years period was approximately 390.

Initially, a quota sampling procedure was used to select teacher participants from each organisation aiming at equal representation of target population (Sturgis, 2008). The number of participants assigned to each organisation depended on which organisation had engaged a

⁷ In the research region, school heads in public schools are referred to as 'Headmasters' whereas, in private schools, they are called 'Principals'. In this research, 'School Leader' is used as a common term to refer to the heads of both public and private schools.

greater number of teachers in PD. The second strategy was stratified random sampling that was carried out to increase the likelihood of representation from various divisions, levels and subgroups (Fraenkel & Wallen, 2009). The identified strata were sector (public and private), gender (male and female), early versus more experienced career stage and duration of PD programme (short-term and long-term). From each stratum, teachers were selected randomly assuming that "whatever is true of the sample will also be true, within certain limits of probability, of the population from which the sample was drawn" (Eisner, 1991, p. 197). Based on this sampling procedure, initially around 35 teachers were short-listed, following which invitation letters were sent to them of which 28 teachers accepted to be part of the study.

The second category of participants consisted of school leaders who were recruited from those schools where teachers have availed in-service PD opportunities. Since those school leaders had experience of working with the in-service teachers, they were expected to be in a position to provide relevant information and insight regarding what the teachers implement and what works for them. While recruiting school leaders, the same stratified sampling procedure was used. Participation letters were sent to around 15 school leaders from which 12 school leaders were identified as the final sample.

The third type of participants consisted of officials of the education department. Four officials were recruited using purposive sampling procedure (Bloor, 2001). Based on the purpose of research, the researcher was interested in consulting with only those officials who monitor and supervise teachers in schools. It was assumed that they would provide relevant data on how aligned the existing programmes are with the needs and realities of schools and to what extent teachers implement their learning acquired from PD programmes.

The last type of participants consisted of PD provider organisations. These organisations have experience of designing and implementing PD programmes for teachers, and it was important to understand their assumptions, objectives and procedures about the PD programmes. As already mentioned, there are four such organisations that provide in-service PD to the teachers in this region. To make data manageable, the research focused on two organisations, the ones who have organised higher number of PD programmes. Again, through purposive sampling, five participants, those who were involved in planning, implementing and monitoring PD programmes were approached and recruited for this research.

3.10 Data Generation Tools and Procedures

Data collection techniques must be competently chosen and applied, otherwise, the conclusions and inferences that a research yield will be biased and suspect (Desimone, 2011; Howe & Eisenhart, 1990). One of the factors that determines the competency of data collection

techniques is that they need to be suitable for addressing the research purpose as it is the purpose or research questions that drive data collection techniques (Howe & Eisenhart, 1990). In adopting case study and especially using grounded theory, a researcher has a range of data collection techniques such as interviewing, focus groups, observations and other documents including diaries at their disposal (Willig, 2013). This research used three major data collection tools: interviews, questionnaire and document analysis. The details on these tools including their rationale and procedures of their use are presented below.

3.10.1 Interviews

Interviews are used to generate information regarding how subjects interpret some phenomenon (Bogdan & Biklen, 1998). Unlike ordinary conversation, interviews penetrate deeper to examine events, views and feelings (Charmaz, 2006). Interviews are flexible research tools that can be used to collect a range of information including views and opinion, personal narratives and histories (Atkins & Wallace, 2012). Because of such flexibility of interviews, this research chose interview as a major data collection technique that allowed gathering detailed information on the views and personal experiences of the stakeholders through asking a broad range of questions on the effectiveness of PD. Interviews with teachers provided detailed insights into those issues and successes that they experience with reforms, and these insights led to the identification of required support to teachers (Desimone, 2011).

3.10.1.1 Focus Groups

Keeping in view the purpose of research, I chose focus group interview to generate data from participants. When the research aimed at a thorough exploration and understanding of effective PD, the focus group was an efficient strategy to make participants reflect and recall what makes a PD programme effective for them. Focus group interviews have such strength as they can stimulate respondents to recall specific events and to articulate their views when they are exposed to the experiences of others (Bogdan & Biklen, 1998; Fontana & Frey, 2000; Rubin & Rubin, 2011). Focus group differs from group interviews. Group interview is simply for convenience and economy (Bloor, 2001), whereas the purpose of focus group is:

either to stimulate talk from multiple perspectives from the group participants so that the researcher can learn what the range of views are, or to promote talk on a topic that informants might not be able to talk so thoughtfully about in individual interviews. (Bogdan & Biklen, 1998, p. 109)

It was observed that the focus groups articulated a range of views on the effectiveness of PD which could not have been possible through individual interviews.

While deciding on the number of groups for focus interview, the researcher was conscious of the breadth and depth of data. Hancock et al. (2007) indicate that the number of groups varies in different studies. Generally, ten to 15 groups are run per study that enables sufficient range and

depth of information. Therefore, a decision was made to run 12 groups of stakeholders as detailed in the Table 3.3 below.

Table 3.3 Number of focus groups in different categories

Participants	Number of groups		
Teachers	6		
School Leaders	3		
Education Department Officials	1		
PD Provider Organisations	2		
Total Groups	12		

The research considered many guiding principles while forming the focus groups. The groups were formed consisting of five members with the assumption that if the number of participants is less than five, it may result in the limited discussion. Moreover, if the number is large, it becomes not only challenging for the researcher to moderate but also frustrating for those participants who are not given sufficient time to express their opinion (Bloor, 2001; A. Cronin, 2008; Hancock et al., 2007).

Similarly, to overcome any issue of status or power (Bloor, 2001), the participants were grouped according to their positions, gender and experience. Separate groups were formed of PD providers, education officials, school leaders and teachers. Teachers were formed groups based on gender and experience as shown in Table 3.4 below. Grouping based on their experience and gender was also helpful to understand any differences in the needs of novice and experienced teachers as well as male and female teachers.

Table 3.4 Types of focus groups interviewed

Gender	Career Level	
Male	Novice	
IVIAIC	Experienced	
Female	Novice	
Torridio	Experienced	

Since this research followed the interpretive paradigm, like other interpretivists who tend to prefer semi-structured interviews (Willis & Jost, 2007), the same approach was used in this research to generate data. Given its qualitative nature, this type of interview provided a greater breadth of data (Fontana & Frey, 2000). Semi-structured interview technique also enabled to use some guided questions, generate discussion and probe deeper based on the responses of participants (Bloor, 2001; Hancock et al., 2007; Hitchcock & Hughes, 1995). Charmaz (2006)

also suggests using open-ended questions for a grounded theory study as such questions will be helpful to encourage detailed discussions that may lead to the emergence of unanticipated stories. The interview questions were framed around the purpose of the research focusing on what makes PD effective for stakeholders (see Appendix B, Interview Protocol).

Before conducting the focus groups, I ran a pilot with a group of teachers. Listening to the recorded discussion allowed me to reflect on the relevance of questions, their clarity for respondents, my interviewing skills and the time an interview might take. As Atkins and Wallace (2012, p. 89) propose:

Recording and listening to it allows us to hear whether we are asking our questions clearly; whether we are giving our interviewee time to answer and – just as important – time to think; whether we are doing too much of the talking or interrupting the interviewee just as their answers get interesting; whether we are distracting the interviewee with our verbal mannerisms or body language; and so on.

After conducting the pilot focus groups, I invited the participants to share their experiences as suggested by Simon (2008). Some of the teachers informed me that they were not familiar with the term 'CPD'. Therefore, it was decided to explain this term to the teachers during the real interviews. Similarly, it was also realised that the focus groups take longer time than I had assumed.

The research was conscious of the problems that could emerge if some participants did not appear for the focus groups. Therefore, specific strategies were employed to ensure participation of required members in the focus groups (Bloor, 2001). The strategies included inviting more participants than needed for a group, forming pre-existing social groups (such as separate groups of males and females), arranging a familiar venue, offering transport and using reminder calls.

While choosing a venue for interviews, I was very conscious that the location should be as quiet and comfortable as possible and there should not be any unwanted interruptions (Bloor, 2001; Hancock et al., 2007). I shared certain guidelines with participants prior to the interviews such as each member should share his/her views, give an opportunity to others, and if they disagree with the opinion of other members, they should openly share their disagreement (Bloor, 2001; Bogdan & Biklen, 1998). To put them at ease, I started the interviews with brief talks on common topics suggested by Bogdan and Biklen (1998) such as how they travelled to the interview location.

The interviews were conducted in the participants' mother tongue which allowed them to freely and easily express their views. While interviewing the participants, my role was not as a "surveyor" rather like "an explorer in uncharted territory investigating and reflecting on what is there" (Atkins & Wallace, 2012, p. 96). As suggested by Bloor (2001), I was facilitating the

discussion and avoiding leading or controlling the group. To make them realise that their views were given much importance, I listened to them actively, maintained eye contact, used appropriate facial expression and nodded head to show my encouragement (Bogdan & Biklen, 1998), and I ensured that no particular member dominated the discussion (Bloor, 2001; Hancock et al., 2007). If any group member was still dominating the discussion or talking for a long time, I was avoiding eye contact with him/her and asking others what they thought about that which had just been expressed (A. Cronin, 2008).

To identify the speaker for transcribing purposes, I asked the participants to say their name while starting to talk and when a participant was concluding her views, I was using her name saying, for example, 'thank you Sara' as suggested by Bloor (2001). Otherwise, identifying the speakers while transcribing group interview data could have been challenging. Such identification was important to understand the perspectives of individual participants and to clarify any confusions, if any, in subsequent interviews with those participants.

I interviewed each focus group twice, each interview lasting for 50 to 90 minutes. The first round of interviews focused on the semi-structured questions developed already, supported by probing questions according to the responses of the participants. The second interviews focused on the gaps or questions arising as a result of analysing the first interviews. With the permission of the participants, the interviews were audio recorded so that I could listen to them repeatedly during the process of transcribing and data analysis. If interviews are not recorded, taking only notes will not enable the researcher to recall all important points (Bloor, 2001; Yin, 2013). Recording allowed me to capture every point as well as to focus my attention on the interview process while it was occurring. I used digital voice recorder as it was easier to use and less disturbing compared with traditional tape recorders (Hancock et al., 2007).

3.10.2 Questionnaire

Charmaz (2006) stated that interviewing is not the only method to generate data in grounded theory. The researcher may complement interviewing with other methods such as surveys, documents and observation. Acting upon this statement, I invited research participants to complete a short questionnaire prior to the commencement of the focus group. The questionnaire contained only those questions which the researcher was really interested in thus it was "no longer than necessary" (Simon, 2008, p. 198). Although the majority of questionnaires generate quantitative data, it may contain open-ended questions (Hancock et al., 2007). The responses to these questions are analysed qualitatively. The questionnaire I administered contained four open ended questions about the types of PD the participants were involved in, the meaning of PD, the purpose of PD and the outcomes of PD (see Appendix C).

The questionnaires were personally administered to the participants before interviews. There were several reasons to administer an open-ended questionnaire to the participants prior to an interview. Questionnaires provide useful information to the researcher who conducts focus groups as data emerging from questionnaire may offer an initial direction to commence the discussion. It also enables a researcher to limit the interview questions and to focus the major questions during interviews. Moreover, it was assumed that filling in questionnaires might allow participants to have some prior thinking regarding PD before coming to the interviews. I was also interested in understanding any differences in the approach of participants towards PD at various levels such as experience, gender, sector and position. Whether participants across different roles and status have the same understanding of the meaning, purpose and outcomes of PD was an interesting question when I was exploring what makes PD effective for them. The questionnaire produced data on perceptions of stakeholders across different levels and roles which allowed me to make a comparison of stakeholders' experiences and attitude across levels, roles and status (Desimone, 2011). The beginning part of Chapter Four presents those varied perceptions in detail.

Similar to the interviews, I piloted the questionnaire to the same group of teachers who had attended the pilot interview. While sharing their experience of filling in the questionnaire, some of the teachers revealed that they were unable to differentiate between 'purpose of PD' and 'outcome of PD'. In the questionnaire, participants were expected to mention their views on the purpose and outcome of PD. Their experience made me realise that I have to personally administer the questionnaire to the participants so that any confusion about the questions in the questionnaire would be addressed.

Responding to the questions in the questionnaire took around 20 to 25 minutes both in its piloting and actual administration for research data generation purposes.

3.10.3 Documents

Yin (2013) indicates that "any case study finding or conclusion is likely to be more convincing and accurate if it is based on several different sources of information" (p.120). Although individual interviews, focus groups and questionnaires provided me with extensive data according to the purpose of my research, some documents enriched and validated those data. As the researcher, I analysed the course evaluation forms and PD modules before conducting interviews. Consequently, these documents also provided a foundation for checking with participants in subsequent interviews.

One of such documents included the course evaluation forms filled in by the teachers at the end of PD programmes (see Appendix D; a sample of evaluation form filled in by a participant). Teachers record their experiences of PD programme in these evaluation forms describing what

was effective for them and what strategies and types of facilitation contributed to their learning. As the researcher, I analysed these documents in the initial stage of the field work. The quantitative parts of the evaluation forms that measured variables of PD programmes on a Likert scale were recorded in a spreadsheet (see Appendix E), while the qualitative parts were noted in word format (see Appendix F). Again, the data emerging from evaluation forms not only provided a basis for subsequent interviews but also allowed the researcher to compare the experiences as noted in the evaluation forms and as reported later in interviews. In other words, analysis of these documents provided insight into other components of lived experiences (Hodder, 1994).

Other documents of relevance to the research were the PD modules of the PD provider organisations. These modules provided data on the assumptions, objectives, contents and procedures of PD providers. The documents allowed me to focus interview questions on selected important aspects and enabled comparison of their espoused theories with theories in action.

3.11 Data Analysis Procedures

Analysis is an ongoing process of organising, synthesising and making sense of data (Bogdan & Biklen, 1998; Glesne, 2006). Following the principle of grounded theory where data collection and analysis is a simultaneous process (Hodkinson, 2008), I started analysing data as soon as they emerged. At the first stage of the analysis, any emerging data were organised. The quantitative parts of evaluation forms were fed into spreadsheets and then turned into graphs to analyse how participants had ranked different features of the PD in the evaluation forms (see Appendix G). The qualitative parts recorded from evaluation forms as well as the data emerging from questionnaires were recorded in NVIVO. The focus group interviews conducted in the mother tongue of the participants were first transcribed and then translated. Sample translations were reviewed with a professional who has expertise in both the local and English languages to ascertain the accuracy of the translation. The transcribed interviews were then imported into NVIVO.

Data generated from documents, questionnaires or interviews and recorded in NVIVO, allowed for the commencement of coding. Coding is "categorizing segments of data with a short name that simultaneously summarizes and accounts for each piece of data" (Charmaz, 2006, p. 43). Initially, I coded data using microscopic analysis technique (Strauss & Corbin, 1998), a process of closely scrutinising data to understand how participants interpret certain events. Although this procedure of analysis is usually referred to as line-by-line analysis, it can also be applied to a sentence or a paragraph. At this stage of open coding, I read the data line-by-line attempting to code them with action words as suggested by (Charmaz, 2000, 2006). Charmaz (2006, p. 48) believes that this "method of coding curbs our tendencies to make conceptual leaps and to adopt

extant theories before we have done the necessary analytic work". Mostly, I used the word or group of words used by the participants to label the code (Birks & Bills, 2011; Willig, 2013). For example, when a line read how the facilitators were encouraging course participants to take active part in classroom activities, I labelled it as 'encouraging participants'. Although line-by-line coding was a very laborious process, it allowed me to capture even minor events that might lead to significant categories in a later stage. Coding large chunks of text would have limited me to only some specific and striking events (Willig, 2013).

Once the initial coding was done through microscopic analysis, I moved to the second step of coding, focused coding (Charmaz, 2006) also referred to as 'intermediate coding' (Birks & Bills, 2011). Compared to open coding, this type of coding is more abstract or of higher level as it submerges relevant codes into categories: phenomena that are most significant to the participants (Strauss & Corbin, 1998). As Charmaz (2006, p. 14) indicates, "Like a camera with many lenses, first you view a broad sweep of the landscape. Subsequently, you change your lens several times to bring scenes closer and closer into view". At this stage, I was evaluating each code to decide whether it forms an independent category, a subcategory or which broader categories particular codes fall into. For example, while doing focused coding, I found that there were many codes highlighting how facilitators encourage course participants to involve them in classroom activities. I merged those codes and made a category labelled 'encouraging and involving participants'. Later on, I realised that this category is, in reality a subcategory of another broader category, 'instructional procedures of the facilitators' that submerged many other subcategories.

Such shifts in data and categories were the result of axial coding, the process of relating or making connections between a category and its subcategories (Charmaz, 2006; Strauss & Corbin, 1998). Axial coding resulted in many changes in the codes and categories. For example, initially, I had put all the codes containing data on the attitude and belief of teachers into one category. Later on, I realised that this category could be divided into two subcategories, for example, 'PD influencing the attitude of teachers' and 'the attitude of teachers influencing their involvement in PD'. Similarly, several times, I shifted codes from one category to another. For instance, 'teachers attaching monetary benefits to PD' was under the category of 'financing PD'. Later on, I shifted this code to the category of 'teachers' attitude influencing their involvement in PD'.

Throughout the process of coding and analysis, I used constant comparative methods to compare data at various levels to find similarities and differences. As Charmaz (2000, p. 515) states, constant comparative analysis means:

(a) comparing different people (such as their views, situations, actions, accounts, and experiences), (b) comparing data from the same individuals with themselves at different points

in time, (c) comparing incident with incident, (d) comparing data with category, and (e) comparing category with other categories.

Sometimes such analysis led me to surface some striking differences in the views of people even at the individual level. For example, in one interview, a school leader from the public sector reported that they had not been given any job description, whereas in the second interview, he had revealed the presence of job descriptions. When such differences were identified through comparative analysis, it was helpful to address the issues in the next phase of data collection and to trace the real situation. Similarly, the comparative analysis also enabled me to shift data from one code or category to another or to differently label an already coded data. While doing the comparative analysis, I was very conscious of what the data suggested and how I subsequently validated my interpretation to avoid misrepresentation of data (Strauss & Corbin, 1998). Thus, coding and analysis were not linear processes; rather I repeatedly moved forward and backward reading and comparing data at various levels.

While doing the analysis, I continually recorded my thinking and the process of analysis in the form of memos. Memo writing is a unique feature of grounded theory that records the thinking processes and assumptions of the researcher (Birks & Bills, 2011; Charmaz, 2000). The memos were of two types: source memos and node memos. Source memos contained my thinking on each source. For example, after interviewing a group and coding the group data, I wrote memos on that particular source recording how the interview happened, what the major codes or categories were emerging from that particular source, how that source supported previous views or changed my direction and what requires further clarification from the same group in the second round of the focus group interview (see Appendix H, an example of source memo). The second type was code memos where I was writing how a code emerged, evolved and developed into a category. I was also recording the overall process of analysis through elaborating my assumptions and the development in the theory. Consequently, memo writing guided my data collection and kept me focused on significant data.

On the basis of memo writing I felt the need to collect further data to saturate categories under development (Birks & Bills, 2011). In other words, memo writing guided me towards theoretical sampling. In the later stage of data analysis, I realised that there were certain categories which required further data and clarification. For example, there were some references to gender. Some participants had reported that being female is an obstacle in PD. However, I felt that I needed further data to fully develop this category as the existing data were not sufficient to analyse gender aspect through different angles. Therefore, I invited a group of female teachers where our discussion focused only on gender aspect. Thus, "the aim of this sampling [was] to refine ideas, not to increase the size of original sample" (Charmaz, 2000, p. 519).

I continued data collection until categories were theoretically saturated. Categories are said to be saturated when new data only fit into the previous categories, and there is nothing fresh for the development of emerging theory (Birks & Bills, 2011; Charmaz, 2006; Hancock et al., 2007).

The continuous process of analysis and memo writing gradually moved me towards theoretical codes, theoretical integration and finally generating a theory. Charmaz (2006, p. 113) accounts that "[w]hen you treat categories theoretically, you raise them to an abstract and general level while preserving their specific connections to the data from which you constructed these categories". Initially, I had coded the views and experiences of participants on how the existing PD programmes meet their needs into three categories namely 'identifying the needs of teachers', 'addressing the needs of teachers' and 'contextual realities and PD'. While at the advanced stage of analysis, I raised these categories to abstract level without disturbing their connections to the data forming these categories. I used the term 'relevance' for these categories as they were all about how the existing PD programmes were relevant to the contextual realities and needs of teachers. Birks and Bills (2011) state that theoretical codes may be drawn from existing theories which situates the final product of grounded theory to a theoretical body of knowledge. 'Relevance' is one of the characteristics of effective PD as reported in the literature on PD of teachers.

Similarly, I had merged many relevant codes into subcategories under the main category of 'instructional procedures'. I raised this category to an abstract level, 'active learning', another feature of effective PD reported in the literature. This process is represented in Figure 3.3 below.

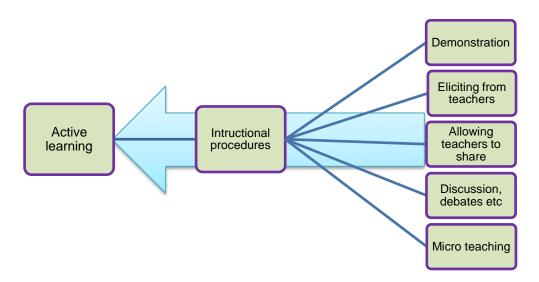


Figure 3.3 Raising codes and categories to abstract level

During this process, however, I did not connect the category with its subcategories and data feeding these categories. Here, I was scrutinizing the categories in relation to the existing knowledge on effective PD. I was inducting theory from the data but also abducting: "considering all possible theoretical explanations for data and pursuing the most plausible explanation"

(Charmaz, 2006, pp. 103-104). Although abductive reasoning happens in every stage of analysis in grounded theory, it was more apparent at this stage (Birks & Bills, 2011) as I was trying to associate data in such a way that had never been done previously. In this way, I was part of the world as I constructed my grounded theory (Charmaz, 2006). Once I raised the categories to higher and abstract level, I searched for possible links among them to organise them in such a way that they can tell a coherent story of effective PD in the research context.

3.12 Trustworthiness in the Research

As an alternative to positivist notions of validity, reliability and objectivity, constructivist research is concerned with trustworthiness, which is the means of demonstrating credibility, authenticity, transparency and integrity of qualitative research (Lincoln & Guba, 2000; M. Patton, 2005). To maintain trustworthiness, this research employed a variety of strategies as suggested in educational literature. These strategies included adequacy of sampling, mock and pilot interviews, investigative skills, peer debriefing and member checking, triangulation, prolonged engagement, memo writing and reflexivity.

3.12.1 Adequate Sampling

A sample is adequate if it relates to the research purpose or question(s) and is selected following defendable criteria (Sandelowski, 2007). To ensure the adequacy of sampling, this research recruited participants who were assumedly more informed on what makes PD effective for teachers. Similarly, as suggested by Strauss and Corbin (1998), the researcher needs to collect multiple views on some phenomenon that will allow looking at it through various angles. Following this principle, I collected data from a range of individuals who represented the field at multiple levels such as teachers, school leaders, PD providers and officials of the education department. The extensive data coming from a variety of stakeholders allowed me to consider the phenomenon from various angles. In addition, the participants were recruited using a variety of sampling techniques such as quota sampling, stratified random sampling and purpose sampling. Such techniques were used to select a more adequate sample for the research.

3.12.2 Mock and Pilot Interviews

Mock and pilot interviews enhance the credibility of a research through ensuring the questions asked by the researcher are well understood by the informants (Field & Morse, cited in Krefting, 1991). Before starting formal interviews with the participants, I conducted a mock interview with my colleagues who shared their experience on the level of the questions and my interviewing skills. Next, I conducted a pilot interview with a small group of teachers to ensure my participants understood the questions as intended. Based on this experience, I was conscious of my investigative skills including the framing of questions and their repetition (May, cited in Krefting, 1991).

3.12.3 Triangulation

Another way to augment trustworthiness is triangulation which includes using different techniques to generate data such as interviews, observations and written reports (Strauss & Corbin, 1998). Although the major technique of data collection in my search was interviewing, I supported this tool with questionnaires and document analysis. Consequently, I had a range of evidence to support my conclusions. Similarly, triangulation was also ensured through collecting data in different settings and from different groups of people. Data were further compared within and between groups to draw authentic conclusions.

3.12.4 Prolonged Engagement

Lincoln and Guba (1895) suggested 'prolonged engagement' to ensure credibility of the research. Prolonged contact with informants results in decreased distance between the researcher and the informants, intimate familiarity and increased rapport, thus, allowing discovery of sensitive or previously hidden information (Kielhofner, cited in Krefting, 1991). Following this principle, as the researcher, I remained in the field for a long period of time (eight months), and was constantly interacting with the participants. As a result of my prolonged engagement with the participants, an increased rapport was developed. I noticed that, at the later stage, the participants were sharing their perspectives more openly compared with the initial stage of data collection. Such intimate familiarity also enabled the identification and varication of recurrent patterns.

3.12.5 Peer Debriefing and Member Checking

The strategies of peer debriefing and member checking were also used to ensure trustworthiness in the research (Newman, Newman, & Newman, 2011). The researcher engaged other professionals at two different stages. Firstly, to ensure the accuracy of translation, both English and Urdu versions of the interview protocol were shared with a professional who possessed good command on both English and Urdu languages. Secondly, for the similar purpose, the researcher shared the translation of transcriptions with another professional. These professionals shared valuable feedbacks to further enhance the accuracy of translation. Similarly, before starting the second round of interviews with each group, the researcher shared with them the patterns and themes emerging from the analysis of the first-round interviews. Such measure was carried out to ensure that the participants' views had been analysed in an authentic way.

3.12.6 Memo Writing

As suggested by the grounded theorists (for example, Charmaz, 2000), the researcher regularly documented the emerging patterns, thoughts, feelings and the development in the theory in the form of memos. Memo writing helped me to become aware of my preconceived assumptions

and biases, if any. Consequently, memo writing proved an effective tool to achieve the trustworthiness.

3.12.7 Minimizing Subjectivity

This discourse relating to the challenges of objectivity in research came to the fore in Germany lead by Kant, and there was, however, a strong reaction against this view (Willis & Jost, 2007). Kant argued that we have preconceptions of every subject matter and it is impossible to separate our subjective opinions from research. Thus, there is an element of subjectivity in every piece of research. The important thing is to recognise subjectivity and biases and to take steps to minimise their influence (Howe & Eisenhart, 1990; Strauss & Corbin, 1998).

Subjectivity was a challenge for me too when I embarked upon the current research journey. Firstly, I had an implicit theory of PD because of my understanding of relevant literature. Secondly, I had experience of working on capacity building of teachers in the research context. Minimising my subjectivity in such situation was a big contest for me. Literature helped me in minimising intrusion of subjectivity into my research.

Most of the strategies discussed in the preceding section on trustworthiness also supported me in minimising subjectivity. Another significant strategy to overcome the challenge of subjectivity which also supported me to ensure trustworthiness was reflexivity. Reflexivity is questioning our assumptions, critically looking at any influences that might affect the collection and interpretation of data and developing transparency in the research process at multiple levels (A. Clarke, 2006; Engward & Davis, 2015; Guillemin & Gillam, 2004). Strauss and Corbin (1998) stated that important questions a researcher should ask include:

Are these concepts truly emergent, or am I seeing these concepts in the data because I am so familiar with them? If they are truly emergent and relevant, then how are they the same as, and how are they different from, those in literature? (p. 49-50)

While analysing data, I was making sure that the influence of my preconceptions was minimized in the way I coded, categorised or interpreted data. Rather I ensured that the codes were clearly aligned to what emerged from the views of participants.

To conclude this section, it is acknowledged that being an insider was helpful for me. As some scholars (for example, McDermid, Peters, Jackson, & Daly, 2014) believe, the pre-existing relationship of a researcher with the participants is advantageous for the reasons that such relationship results in developing familiarity, respect and rapport. Because of my prior understanding of the context and familiarity with some of the participants, it was quite easy for me to develop rapport. The principle of reflexivity allowed me to critically examine the data even from those participants who were known to me. I agree with Dwyer and Buckle (2009) that what

matters is the ability of researchers to be open, authentic, honest and insightful about their role in presenting the views of participants and interpreting the phenomenon.

3.13 Ethical Considerations

Ethical practice is an important aspect of research and researchers are, therefore, bound by both standard sets of ethics and personal codes of ethics. It has been argued that social science researchers should adhere to the fundamentally essential ethical obligations, such as, informed consent, confidentiality, privacy, honesty, accuracy in data and sensitivity to cultural values (Mason, 2002; McDermid et al., 2014; M. Patton, 2005; Stake, 2000). As Bogdan and Biklen (1998) state, ethics guidelines guarantee that "informants enter research projects voluntarily, understanding the nature of the study and dangers and obligations that are involved [and secondly] informants are not exposed to risks that are greater than the gains they might derive" (p. 48).

To begin with, the researcher was an 'insider' in the research region because of sharing a similar ethnicity and culture with the participants (Mercer, 2007). In addition, some of the participants were already familiar to me as I had the experience of working on capacity building of teachers in this region. Although such relationship proved to be advantageous in developing respect and rapport, the researcher was mindful to the fact that the participants may feel forced or cannot deny participation fearing adverse consequences for the relationship (McDermid et al., 2014). To overcome this power dimension and relationship issue, the researcher did not meet the participants personally to invite them to participate in the research. Such interaction might have led to the reduced options for the participants to deny participation in the research. Instead, potential participants were sent letters by post. Through these letters, information statement was shared with the participants informing them about the purpose, duration, procedures, potential benefits, possible risks and consequences of the research to obtain their informed consent. Their voluntary participation was emphasised along with the right that they may decline to participate or decide to withdraw at any stage without explanations and consequences (McDermid et al., 2014).

While selecting interview locations, I was very mindful of cultural factors, for example, arranging safe and comfortable venue especially for females. I scheduled interview timing and location in consultation with my participants, keeping in view their time and comfort factors. I was also aware that my dress would mean a lot to the participants (Bogdan & Biklen, 1998). Therefore, throughout data collection, I dressed in the way other participants were dressing (Shalwar Kameez⁸). Since most of the participants travelled to interview locations from their schools or

⁸ The *shalwar* (baggy trousers) and the *kameez* (long shirt) are traditional outfits originated in the Indian subcontinent. People in Chitral wear Shalwar Kameez.

homes, I offered them refreshment and money to cover out-of-pocket expenses as a result of attending the interviews (Bloor, 2001).

Similarly, while interacting with them, I tried my best to respect their culture, views and practices and sought to avoid disturbing their routines. At every stage of the research, I judged my actions and interpretations with sensitivity to the participants' values, beliefs and culture. I was particularly careful and conscious about what and what not to include in the research report. Moreover, as advised by Vazir (2004), I kept the data (recordings and transcripts) confidential in a locked cupboard and password protected computer so that they could not be seen or misused.

Participants' identities are kept anonymous, and I do not present the personal and private information gathered from them in a way that could lead readers to deduce their identities (Bogdan & Biklen, 1998). Pseudonyms are used instead of real names throughout the research report. However, in focus group interviews, information was shared among members of the group. To minimise the risk of disclosure and to maintain confidentiality in such situation, the voluntary nature of research was emphasised (Bloor, 2001). The researcher also allowed the participants to raise any questions and to share any such information through email or personally which they did not want to share during group interviews. The group members were also requested to keep the discussion points confidential. Interviews may have been distressing for some participants, but I observed little evidence of this in my interactions. Even if interviews involve such risks, it has been argued to weigh them against the benefits for the wider population (McIlfatrick, Sullivan, & McKenna, 2006).

3.14 Structure for Reporting the Findings

This section introduces the framework employed to present the findings of my research. Using the theoretical framework of Desimone (2009, see page 41), this research explored perceptions of key stakeholders on the effectiveness of PD in rural Pakistan. In line with the purpose and the theoretical framework that guided this research, three major themes emerged as a result of ongoing analysis of data. These themes include a) perceived meaning, purpose and outcomes of PD, b) features of PD and c) contextual factors influencing PD. Figure 3.4 in the following page visually represents the framework. The arrows connecting the boxes in the framework are to indicate that the three aspects, namely perceptions, features and context are interrelated and influenced by one another. It is to be noted at this stage that for clarity and manageability, the findings are presented into two separate chapters.

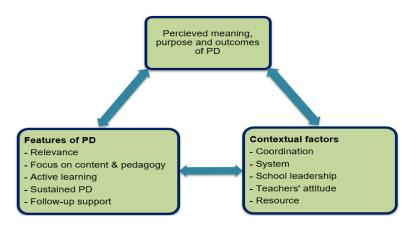


Figure 3.4 Framework used for presentation of findings

The first chapter of findings is divided into two major parts. The first part of the chapter documents the participants' perspectives on the meaning, purpose and outcomes of PD by analysing the data emerging from questionnaires. The data emerging from participants' responses to the written questions are presented with the assumption that documenting their beliefs at the outset will be helpful in identifying alignment between participants' responses and features of existing PD programmes. As such, this part of the chapter provides a background to the major theme of features of effective PD and responds to the research question on what meaning, purposes and outcomes stakeholders in the research context attach to PD to determine what PD is for them and what they want to achieve by attending PD.

The next part of the chapter focuses on the features of effective PD as perceived and experienced by the participants and represented in the left box of Figure 3.4. To do so, the chapter presents data on what teachers learnt attending PD programmes and what features of PD facilitated their learning. As emerged from ongoing analysis of data, these features include the relation of PD to the real needs of teachers, focus on content and pedagogy, active learning, sustained PD and regular follow-up support. The chapter responds to the question on what teachers learnt attending PD and what features of PD contributed to their learning.

The next chapter of findings as identified in the right box of Figure 3.4 presents views of participants on contextual factors that influence features of PD and perceptions of stakeholders on PD. As emerged from analysis of data, these contextual factors include coordination, monitoring, accountability, school leaderships, teacher attitude and resources. Emerging from the experiences of the key stakeholders, the chapter brings in insights unique to the research context regarding the factors that influence the effectiveness of PD and implementation of learning resulting from PD. Together, these chapters will respond to the bigger question of what makes PD effective for teachers in the research context.

In line with the grounded theory approach employed in this research, the data and their interpretation will go side by side instead of simply presenting findings. Moreover, given the

qualitative nature of the research, qualitative terms as outlined in Table 3.5 below will be used for reporting.

Table 3.5 Reporting terms adopted from Prairie Research Associates (n.d.)

Reporting terms	Estimated percentage
A few	10%
A minority	11% to 25%
A large minority	26% to 40%
About half	41% to 60%
A majority	61% to 75%
A large majority	More than 75%

3.15 Conclusion

This chapter described the methodology used to understand what makes PD effective for teachers in rural Pakistan. The chapter presented and justified the selection of the specific lenses, methods and tools including research paradigm, research approach, research method, setting, data collection tools and data analysis procedures. Some ways to minimise the subjectivity as well as the ethical considerations were also explained. The chapter concluded with a framework into which the findings of the research have been structured. The next chapter will present the first section of the findings emerging from questionnaire data, namely, the perceived meaning, purposes and outcomes of PD.

4. STAKEHOLDERS' PERCEPTIONS AND EXPERIENCES OF PD

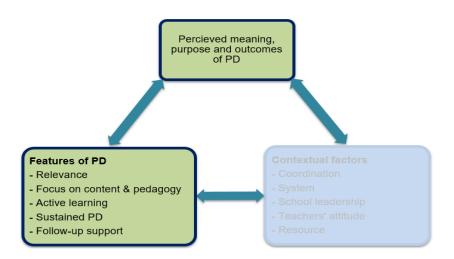


Figure 4.1 Representing the focus of Chapter Four

4.1 Introduction

This chapter presents stakeholders' perceptions and experiences of PD. In doing so, as shown in Figure 4.1, first, the perceived meanings, purposes and outcomes of PD are presented and interpreted to draw an initial conclusion on what is PD for the stakeholders and what they want to achieve as a result of their involvement in PD. Then, as shown in the figure above, the chapter moves on to the major theme of the thesis, the features of effective PD. Under this theme, the experiences of the stakeholders on what makes PD effective for them are presented and interpreted. While analysing and interpreting data, in line with the GT approach, new literature is brought in to support or refute the findings and to draw valid conclusions.

4.2 Perceived Meanings, Purposes and Outcomes of PD

As highlighted in Figure 4.1 representing the focus of this chapter, first, research participants' perceived meanings, purposes and outcomes of PD are presented. This part of the chapter has a developmental focus in response to the initial two sub-questions of research including:

- How do key stakeholders define PD?
- What do key stakeholders believe are the purposes and outcomes of PD?

First, data emerging from the questionnaire in response to the first question are presented and interpreted to understand how PD is defined by the stakeholders in the research region and how their views are aligned with the meaning of PD as propagated in recent educational literature. Then the chapter moves on to responding to the second question namely what key stakeholders

believe are the purposes and outcomes of PD. Thus, drawing on questionnaire data, initial inferences are proposed re stakeholders' perspectives on effective PD in the research context.

4.2.1 Meaning of PD for Stakeholders

In response to an open-ended question in the questionnaire on the meaning of PD, the research participants recorded a wide range of definitions. To provide readers with a fuller range of the responses aiming to enhance the trustworthiness of the subsequent conclusions, the definitions of PD emerging from the questionnaire are provided in the Table 4.1 below.

Table 4.1 Meaning of PD for stakeholders

Meaning of PD	Respondent
PD means being enlightened of new teaching learning skills and to introduce them into the classroom.	Teacher
The process of acquiring knowledge and skills that allow you to make progress in your career.	Teacher
To polish the basic skills and ideas of an individual through guidance such as workshop and other related activities to enhance individual capability.	Teacher
PD is obtaining more and more information about our profession.	Teacher
PD is the process through which teachers familiarize themselves with modern ideas and teach students using modern strategies.	Teacher
All those activities which enhance an individual's overall skills is called PD. Skills such as communication skills leadership skills, management skills etc.	Teacher
The training that provides skills to a teacher relevant to his subject so that the teacher could effectively use those skills in classroom.	Teacher
PD is a broad term that can refer to a variety of education, training and development opportunities. PD is a systematic effort to bring about positive change in classroom.	School Leader
All those activities carried out to enhance the skills, knowledge and also develop a positive attitude in a person towards his profession.	School Leader
Professional development is a process of developing individuals, organizations and larger society with skills, knowledge and attitude regarding their relevant fields.	School Leader
A continuous process through which we bring changes in our attitude, behavior, practice and techniques.	PD provider

It is an ongoing process of reflecting on ones' own practices or learning from others the purpose of which is enhancing knowledge and skills related to a particular profession.	PD provider
Process of improving ones' capacities through education, training and observing others.	PD provider
Continuously keeping oneself updated with the new and updated knowledge (both content and pedagogy) to be able to facilitate students' learning according to the teaching needs of the rapidly developing and technologically advanced world.	PD provider
Any planned and unplanned activities which improve/ enhance learners existing knowledge, skills and attitude to bring improvement in her/her work.	ADEO
Any ongoing development of knowledge and skills of an individual in her/his field of practice.	ADEO
By PD, I mean all the planning and activities done to improve the skills of teacher either content or methodology.	ADEO

An analysis of the definitions of PD as listed in the table above shows that stakeholders in the research region attach a variety of meaning to PD. The phrases derived from their definitions indicate the breadth and diversity of the stakeholders' views on the meaning of PD. Accordingly, PD is viewed as:

- 1. acquiring knowledge and skills
- 2. obtaining information
- 3. to refine basic skills and ideas
- 4. to enhance individual capability
- 5. guidance such as workshop
- 6. training which provides skills
- 7. activities done to improve the skills of teachers
- 8. systematic effort to bring change in classroom
- 9. to develop a positive attitude
- 10. a continuous process/an ongoing learning
- 11. reflecting on one's own practices
- 12. learning from others
- 13. observing others
- 14. planned and unplanned activities

A critical analysis of the phrases listed above indicates that the views of stakeholders range from PD being a process of acquiring knowledge to PD as an ongoing process of reflection,

observation and learning from others. In other words, stakeholders hold both conventional and reform or innovative view of PD. While defining PD, some respondents recorded such words and phrases which demonstrate a conventional view of PD. For example, the words 'training', 'acquiring' and 'obtaining' suggest that for some respondents, PD is gaining knowledge and skills from others. In this sense, PD is a process where a more qualified agent transfers knowledge and skills to less knowledgeable teachers. Such conventional view of PD could be elicited from the views of many other respondents. For example, one respondent considers PD as a guided activity such as a workshop, stating:

to polish the basic skills and ideas of an individual through guidance such as workshop and other related activities.

This definition of PD carries several meanings. Firstly, the phrase 'to polish the basic skills and ideas of an individual' suggests that PD is refining the skills of individual teachers. The focus on 'individual' teachers marginalises the value of group learning or something done for or done by a group. Secondly, the other phrase, 'through guidance such as workshop' indicates that PD is a process of directing teachers through some one-time event. Similarly, the phrases, 'training' and 'activities done to' also support the views that PD is about the activity of imparting and acquiring skills.

These representative quotes taken from teachers tend towards a conventional view of PD perceiving it as a process where individuals acquire information and skills through attending guided workshops. This view of PD is broadly consistent with training or deficit models of PD (A. Kennedy, 2014a). The purpose of these models is transmission, aiming at preparing teachers to implement reforms that address deficits in their practices. As presented in the literature review chapter (pages 25 to 27), training models have been criticised on the grounds of their failure to actually improve teaching practices (Webster-Wright, 2009). Against this background, the recent reform or innovative models (Garet et al., 2001) advocate that development is not a one-time activity of transferring knowledge or skills from one individual to others. Rather, it is a sustained process of teachers collectively engaging in reflection on their work to enhance teaching. And that this learning is preferably conducted in the work context.

Although school leaders and education department officials have also recorded phrases such as 'training' or 'activities done to', as Table 4.1 indicates, the majority of respondents reporting a conventional view of PD were teachers. However, because teachers mainly recorded a conventional view of PD does not mean that they might disagree with the reform view of PD. On the basis that the reform view did not explicitly emerge from their perceived meaning of PD, it is assumed that the teachers in the research region lack orientation on and exposure to the recent development in educational literature on what constitutes effective PD. This finding, however, is not surprising given that even in some other contexts, teachers view PD as a process of skill

acquisition (Alibakhshi & Dehvari, 2015) and consider and possibly experience external PD as the only learning opportunity (Cole, 2005; Nabhani, Nicolas, & Bahous, 2013).

In contrast to the teachers' view of PD as a process of acquiring knowledge and skills through attending workshops, the majority of school leaders reported that coupled with enhancing skills, PD is also about developing a positive attitude. While defining PD, a school leader noted that PD refers to:

All those activities which are carried out to enhance the required skills as well as to develop a positive attitude in a person towards his profession.

Although similar to the teachers, school leaders attach skill development to PD, unlike the word 'acquire' or 'obtain' which the teachers used in their definition of PD, the word 'enhance' as used in this definition suggests that PD is more than just transmission. It is something that is applied in the classroom, or using the words of another school leader and supported by Guskey (2002), PD is 'to bring positive change in the classroom'. Moreover, school leaders have also highlighted the development of a 'positive attitude' towards their profession and the need for change is often a fundamental pre-requisite for application of new skills. Although school leaders moved from acquisition to enhancement as well as added attitudinal aspect to the meaning of PD, their views did not address or support reform types of PD such as inquiry, reflection, collaboration, networking or any other reference to school-based models of PD. Again, this conclusion needs to be taken with caution. A failure to mention reform models does not necessarily mean that school leaders disregard those models. However, it can be inferred if they had any orientation to reform models of PD, they would have featured in their responses.

Although any explicit reference to PD as an element of reform does not emerge even from the views of ADEOs, they do consider PD to be 'an ongoing development' or 'unplanned activities', which is a different perspective of PD in contrast to most teachers and school leaders. Considering PD as an ongoing process implies conceptualising it as not a once-off activity. However, at this stage, it is unclear whether 'ongoing' to them means attending external workshops time and again or learning continually in the workplace by exploiting all learning opportunities. This phenomenon will be clarified while presenting the ADEO's interview data on the features of PD. Similarly, 'unplanned activities' refer to 'natural learning experiences' (Day, 1999), which are usually associated with reform models where learning happens on the basis of unplanned observation, reflection or discussion with others. It suggests that in contrast to teachers and school leaders, ADEOs perceptions of PD are incorporating some elements of reform models of PD.

The analysis of data coming from PD providers reveals that compared with other stakeholders, they have greater orientation to reform models of PD. This conclusion is drawn based on the phrases such as 'an ongoing process', 'reflecting on one's own practices', 'observing others' and

'learning from others' noted by the PD providers. These perspectives on PD are well supported by the advocates of reform models. Accordingly, PD is an ongoing process that includes natural and planned activities such as reflection, observation, discussion and experimentation (Day, 1999; Fenwick & Tennant, 2004; Nesbit et al., 2004; Shagrir, 2012). However, what is considered more significant in the reform models, and missing in the definitions noted by the PD providers, is the 'collaborative' and 'job-embedded' nature of PD (Lindstrom & Speck, 2004, p. 10). It might be that they either lack orientation to the collaborative and job-embedded nature of PD or appreciate it but did not mention such views explicitly in their definitions. This phenomenon will be clarified in presenting their interview data in the second part of the chapter under the title of features of effective PD.

The above analysis of data emerging from the questionnaire on the meaning of PD reveals that there is no uniformity in the views of stakeholders on the meaning of PD. They view PD through different perspectives. A figurative representation of this phenomenon, on the basis of a cautious analysis of data, is provided in Figure 4.2 below. As the figure shows, teachers are at one end of the continuum, holding more conventional views of PD while PD providers are at the other end with view weighted more towards reform models of PD. In between are the school leaders and ADEOs. The location of ADEOs at the continuum is to indicate that, compared with school leaders who are located close to the teachers at the continuum because of their conventional view of PD, ADEOs hold a reform view of PD.

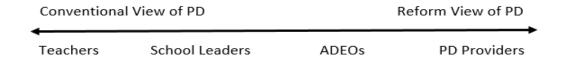


Figure 4.2 Stakeholders' Views on PD

It is interesting to note that the demographic data provided in the questionnaire on PD indicated that compared with teachers and school leaders, PD providers and ADEOs have relatively greater access to PD opportunities and thus to updated knowledge on PD. Given their greater access to PD experiences and the teachers and school leaders limited access, it is understandable that this variation in perceptions of PD emerged from this research.

4.2.2 Purposes of PD for Stakeholders

Beyond seeking participants' conceptions of PD, the questionnaire also posed an open-ended question asking participants to record their perceptions on the purposes of PD. An extensive range of participants' responses to this question is provided in Appendix I. To generate a detailed understanding of participants' perceptions of the purposes of PD responses were analysed by searching for specific words or phrases linking to purposes. Where the respondents did not use such specific words or phrases, their views were elicited based on the meaning of

the response. For example, if a teacher noted that, as an outcome of PD, 'the issues of classroom management are resolved', it was inferred that the teacher is referring to a purpose of PD as being 'to improve practices'. As a result of such analysis, the following areas emerged as the most frequently reported purposes of PD.

- a) To learn job related new knowledge
- b) To learn teaching skills
- c) To use new skills in the classroom
- d) To enhance student achievement
- e) To develop better attitude and motivation
- f) To develop confidence in teaching

The above list indicates that although limited in range and variety, participants have reported many significant purposes of PD. The first five purposes align with the major purposes of PD as proposed by Guskey (2002). On the basis of the noted purposes, it is assumed that stakeholders in the research region are aware of the importance and need of PD. Attaching a purpose to PD also suggests that the respondent wants to achieve that purpose. Thus, a general view indicates that stakeholders want to enhance knowledge, skills, practices, attitude, confidence and student achievement by attending PD. How the existing PD programmes have contributed to achieving the purposes stakeholders attach to PD is one of the major focuses of this research which is addressed later under the heading of 'Features of Effective PD (page 80). At this stage, I examine which purposes of PD were given greater value by the stakeholders to understand their priorities and preferences. The frequency in which specific purposes were identified by participants are recorded in Table 4.2 below.

Table 4.2 Purposes of PD and number of respondents

Purpose of PD	Reported by number of respondents
To learn teaching skills	10
To use new skills in the classroom	8
To learn job related new knowledge	6
To develop better attitude and motivation	6
To enhance student achievement	5
To develop confidence in teaching	4

Out of 35 participants who responded to the question, the table indicates that 'learning teaching skills' was reported by ten participants with 'using the new skills' reported by eight respondents. To learn new knowledge and to develop better attitude and motivation were the next frequently emerging purposes, each reported by six respondents. Similarly, enhancing student achievement and developing confidence were rated by five and four respondents respectively.

An analysis of these data indicates that none of the purposes has received a high response from the respondents. For example, 'learning teaching skills' which has received the highest value has been reported by only ten participants. In addition, it can be noted that compared with student achievement reported by a minority of participants, other purposes of PD such as learning new skills and using the new skills in the classroom were reported by a greater number of participants. Aiming to improving teaching skills and classroom practices is not surprising given that the educational literature also stresses the importance of these purposes (Fullan, 2007; A. Hargreaves, 2002). However, in the educational literature, student achievement has been given much priority, and becoming a better teacher is linked to enhancing student outcomes (Darling-Hammond, 2004; Fullan & Hargreaves, 1993; Guskey, 2003b). Only a minority of participants reported improving student achievement as the purpose of PD. This is an important finding as it indicates teachers in this research are still focusing on improving their teaching skills over and above the issue of improving student learning outcomes. It may be that they believe student learning outcomes will improve as a result of their improved teaching skills. However, it may also be a case that they feel under-prepared for their work as teachers. As discussed in the introductory chapter, pre-service teacher education programs were reported as failing to equip teachers with the required skills to successful manage classrooms independently (Siddiqui, 2007). Alternatively, stakeholders may prioritise improvement in student achievement, however, fail to indicate this as a purpose of PD. Yet another assumption for a lower rating given to student achievement could be that participants might be considering it as an outcome rather than a purpose of PD. If this assumption is true, student achievement will be rated highly as an outcome. The next section presents data on perceived outcomes of PD.

4.2.3 Outcomes of PD for Stakeholders

A further open-ended question in the questionnaire asked participants to reflect on their desired outcomes as a result of participating in PD. The detailed responses of the respondents are attached as Appendix J. Analysis of the responses noted by the participants resulted in the following most frequently emerging outcomes of PD.

- a) Improved classroom practices
- b) Improved knowledge
- c) Enhanced Skills
- d) Improved attitude
- e) Enhanced student achievement
- f) Improved performance of institution
- g) Students as productive citizens
- h) Enhanced confidence
- i) Motivation for self-directed learning

As the list shows, participants have reported many significant outcomes of PD. These outcomes of PD especially the first five have consistently been reported in the educational literature (Fullan, 2007; Ingvarson, Meiers, & Beavis, 2005; Joyce & Showers, 1980). Of particular importance in the list is the perspective of a couple of participants who believed that PD enhances 'motivation for self-directed learning' (Nesbit et al., 2004) which is a form of learning usually associated with the reform models of PD. However, Harland and Kinder (2014) also identify some other outcomes, for example, the impact of PD on practices of other teachers, shared meaning and collaboration. Although a few participants listed improved institutional performance as the outcome of PD, there was no reference to such outcomes of PD which could indicate the impact of PD beyond individual teachers and individual practices.

The perceived outcomes were further analysed to understand which outcome of PD is given greater value by the participants. Table 4.3 below represents the sequence of the outcomes.

Table 4.3 Perceived outcomes of PD with number of respondents

Outcomes of PD Noted by the Respondents	Number of Respondents
Improved classroom practices	13
Enhanced student achievement	7
Improved skills	5
Improved attitude	4
Students as productive citizens	4
Enhanced confidence	3
Improved knowledge	3
Improved performance of institution	3
Self-learning	2

As the table indicates, from the 33 participants the most frequently noted outcomes of PD was improved classroom practices. Seven participants believed 'enhanced student achievement' to be an outcome of PD, which was positive to note given its minimal representation in purposes of PD. However, this is still less that a 25% of participants acknowledging the importance of enhancing student achievement as an outcome of PD "Students as productive citizens" received four responses and this could be aligned with enhancing student achievement although stated differently. 'Improved attitude' and 'improved skills' received similar responses.

Variations in outcomes of PD as reported by the participants may be interpreted in several ways. Firstly, stakeholders could be valuing student achievement but they did not explicitly indicate it in their responses to the given question. Secondly, stakeholders may lack orientation to the ultimate aim of PD as being enhanced student achievement. Thirdly and interestingly, similar to Guskey (2002), stakeholders might perceive that PD will first result in changed classroom

practices that will then lead to changes in student outcomes. Guskey contends that change in beliefs will happen when teachers observe a change in student outcomes and the responses from participants in this research appears to reinforce a focus on improved teaching as a prerequisite to changes in student outcomes. These assumptions will be addressed again in the next part of the chapter while presenting data on the features of effective PD.

To summarise, in pursuit of the overarching question central to this research: what makes PD effective for stakeholders in the research context, this part of the chapter responded to the two sub-questions namely how do key stakeholders define PD and what do they believe are the purposes and outcomes of PD. Data revealed that the majority of participants especially teachers hold a conventional view of PD believing it to be a process of acquiring knowledge and skills by attending workshops and other related activities. Although PD providers and some of the education department officials view PD as an ongoing process of reflecting on one's practices, observing others, and/or learning from others, no explicit references were made to collaborative learning, job embedded learning, mentoring and other reform models of learning. Similarly, their focus as the purpose and outcome of PD was on improving their skills and practices, rather than enhancing student achievement. However, it is reiterated that these conclusions are made based on what the respondents have noted in their responses to the questions in the questionnaire. When they consider PD to be a process of acquiring knowledge and skills, it may not be claimed that they disregard the reform models of PD. Similarly, when participants report improved practices as an outcome of PD, it does not mean they neglect student achievement. Nevertheless, two major conclusions may be drawn based on these findings. Firstly, the majority of stakeholders in the research region lack orientation to the reform models of PD. Otherwise, there could have been explicit references to these models while defining PD. It might be that stakeholders in the research context have mainly experienced a training model of PD and this is reflected in their responses. Secondly, stakeholders in the research region lack a shared understanding on the meaning, purpose and outcomes of PD. Different stakeholders associate different meaning, purpose and outcome to PD. This phenomenon suggests a lack of coordination among the stakeholders.

With the above understanding of the perceived meanings, purposes and outcomes of PD, next the chapter will focus on existing PD within the research context to understand their forms and models and how they assisted the stakeholders in achieving the reported purposes and outcomes. Thus, to answer the bigger question of what makes PD effective for stakeholders, the next part of the chapter will respond to the following sub-questions.

- 1) What are the key stakeholders' experiences of PD?
- 2) What criteria do stakeholders use to determine the effectiveness of PD and why?

4.3 Features of Effective PD for the Stakeholders

This part of the chapter presents features of effective PD as perceived and experienced by the stakeholders in the research context. As highlighted in Figure 4.1 (page 70), six key features which make PD effective for the stakeholders were drawn from the interview data during analysis. These features included relevance of PD to the real needs of teachers, focus on content and pedagogy, active learning, sustained programmes and follow-up support. The section starts with the relevance of PD, presenting and interpreting data on what relevance means to the stakeholders, why they stress relevance and to what extent the existing programmes address this feature. Next, the views of participants on the content of PD programmes are presented, highlighting their preference for both content and pedagogy focused PD. The section then moves on to presenting and interpreting data on active learning experiences and demonstrates how active learning experiences contribute to enhanced knowledge and skills of teachers. The section also presents and interprets data on sustained PD programme that refers to the duration and frequency of PD. The section establishes that sustained duration supports the other features of PD such as active learning and focus on content. The section ends with presenting data on follow-up support and illustrates how such support facilitates teachers in implementing and sustaining the new practices.

4.3.1 Relevance of PD to Teachers' Needs

Relevance of PD to the real needs of teachers was identified as one of the most significant factors determining the effectiveness of a programme. 'Need', according to the participants, referred to a gap between the expected roles of teachers and the skills they required to effectively perform those roles. In other words, teachers in the research context had certain gaps in their practices, and an effective PD for the participants was the one which enabled teachers to address those gaps. ADEOs representing public sector revealed that they evaluate their PD programme on the basis of whether it fills a specified gap. Nazia⁹, an ADEO stated that they evaluate:

What teachers need, and in what areas they need improvement? Whether they need support in classroom management, resource management, content, teaching strategies or community involvement. PD is effective if it addresses those particular gaps.

School leaders and teachers supported this view articulating that effective PD was the one that enabled them to address the issues that they encountered in their schools and classrooms. Some of the issues they highlighted were: teaching multi-grade classes, teaching early childhood level classes, managing schools, handling slow learners, teaching writing skills and teaching overcrowded classes.

⁹ Pseudonyms have been used instead of the real names of the research participants.

Government primary schools in the research context use multi-grade classrooms where usually two teachers teach five or six class levels. Ironically, as revealed by the participants, the preservice programmes conducted for primary level teachers prepared them for teaching monograde classes. The primary level teachers reported that they face many challenges in handling multi-grade classes. In this background, some of the primary teachers referred to, and highly valued, an in-service course on multi-grade teaching arranged by one of the PD providers in that region. These teachers reported that the course was very relevant to their school situation and needs. Wali, a primary level teacher narrated that:

Previously it was very challenging to teach two or three classes at a time. When I was teaching one level, the other level was so noisy that it was difficult for me to teach and for students to concentrate. I was rushing from class to class to maintain discipline. Effective teaching was not possible. When we were provided with knowledge and skills to integrate concepts through developing concept grids, it was very helpful to combine two or more classes and to engage them in meaningful activities.

The above excerpt represents views of primary level teachers concerning the challenges they face while teaching multi-grade classes. Since the focus of the in-service course on multi-grade teaching was closely aligned to the strongly felt needs of those teachers and a pressing problem situation of primary schools, teachers attending the course were able to relate the content to their real needs and, thus, considered that programme effective.

Similarly, with the realisation that early years have a significant role in the overall development of an individual, schools in the research region have introduced the concept of ECE. Since the concept is relatively new in this region, most of the teachers lacked ideas and skills to teach ECE level classes. Arifa, a school leader from the public sector, reported that:

Now we are expected to provide a holistic and joyful learning environment for young learners. This is my school issue, and I need support in this area. For me, an effective PD is the one that trains my teachers in teaching ECE classes.

It was revealed that both the PD providers organise short term (one day to two-weeks) PD programmes for teachers on ECE. Teachers who attended ECE programmes reported that the idea and skills acquired from those programmes helped them successfully implement the concept of ECE in their respective schools. Uzma, an ECE teacher, commented that when she took over the role of teaching children in a newly established ECE centre, she found it very challenging. Using her words:

Initially, it was perplexing for me to be with children. I did not know what to teach them and how to teach. They were so noisy. Luckily, I was given an opportunity of training on ECE. In this programme, we were provided with ideas and skills related to ECE such as the concept of Highscope¹⁰, developing corners and engaging children in those learning corners. These ideas helped me to successfully introduce the concept of ECE in the newly established centre.

¹⁰ A research-based approach to early childhood education

The excerpt suggests that although the schools realised the importance of ECE and subsequently established ECE level classes, they lacked skilled human resources to successfully implement the concepts required. In this scenario, PD opportunities on ECE were highly valued since teachers attending these programmes developed ideas and skills relevant to their needs. Consequently, participants considered those learning experiences effective which enabled them to address their real issues.

It was also revealed that in the research context, individuals are usually assigned school leadership roles without providing any exposure to leadership development programmes. Consequently, such individuals face tremendous challenges in performing the newly assigned roles and responsibilities. Educational leadership programmes proved to be particularly helpful for such individuals as they learnt ideas and skills to lead their schools. As Munaza, a female school leader from private sector, stated:

Before attending a PD programme on educational leadership, I was very much confused. Issues of students, issues of teachers, issues of parents and issues of resources. Once I was so tense that I was about to leave the job. At that time, the Mountain Institute¹¹ conducted training for school leaders where we were provided with ideas and skills on leading and managing schools. Whatever issues the trainers were discussing, I was feeling that they are talking about my school issues. That programme not only made me reflect on the issues but also provided me with ideas to address those issues.

When individuals are assigned the responsibility of managing schools without exposing them to the theories and practices of leadership, they face challenges as represented by the views of Munaza. To be successful in such challenging times, they require ideas on successful school leadership preferably closely related to their real issues.

These examples suggest that an effective PD for participants in the research context is the one which is relevant to the current situation of teachers, and enables them to address their real issues. This finding is supported by studies reported from many other contexts (Bayar, 2014; Cameron et al., 2013; Zepeda et al., 2013). These studies have revealed that teachers consider PD experiences effective when they are aligned to their existing needs or related to what they do in classrooms.

Although there was some evidence to support the importance of PD programmes being relevant to the real needs of teachers, the majority of the participants reported their dissatisfaction with the existing PD programmes largely owing to their lack of relevance. Teachers reported that muultigrade and ECE programmes were helpful in addressing their real needs, however, they were only very occasionally organised such that the majority of teachers teaching at primary level lacked access to multi-grade and ECE programmes. Some excerpts highlighting the views

¹¹ Pseudonym used for one of the two PD provider organisations included in this research.

of participants on the lack of alignment of PD programmes with the strongly felt needs of teachers are presented below.

Instead of providing us with general theories such as Bloom's taxonomy, PD providers have to support us in teaching multi-grade classes, handling an overcrowded classroom and checking notebooks of so many students when we are two teachers in a school. These are our real issues, and we need support in addressing these issues (Shafiq, Government Primary Teacher)

I have been facing difficulty in teaching writing skills to students. Training on multiple intelligence will not support me to teach basic principles of writing to students. No one is supporting me in addressing my real issue. (Junaid, Government Secondary English Teacher)

Facilitators are usually talking about those concepts that are not that much relevant to us. My issue is how to handle slow learners. Despite I have attended several PD programmes, this topic was not covered in those programmes. I hardly bring anything to be implemented in my class. (Razia, Private Sector Teacher)

These excerpts suggest that although teachers availed themselves to PD opportunities, they were less satisfied with them because of their failure to address their immediate needs. Teachers felt the need of support in multi-grade teaching, teaching writing skills, handling overcrowded classrooms and treating slow learners. Most of the PD programmes, however, did not focus on these issues. Instead, they included other topics of general theoretical nature such as multiple intelligence and Blooms Taxonomy that might be useful in the longer term if only the teachers gained support in addressing their immediate strongly felt needs. This issue was metaphorically highlighted by Nazia, an ADEO, that:

If someone is thirsty and he is given food, his thirst will not be quenched. Although input is given, it is not relevant.

Thus, the existing programmes run short of an effective feature of PD, i.e. alignment of PD to what teachers already do, what immediate issues they face and what they required to be effective practitioner in the given situation (Birman et al., 2000; Desimone et al., 2002; Garet et al., 2001; Penuel et al., 2007; Soine & Lumpe, 2014).

The main reason behind the lack of relevance of the existing programmes to the needs of teachers, as reported by the participants, was PD providers' lack of exposure to, and understanding of, the contextual realities and needs of teachers. Participants commented that PD providers try to implement imported theories without analysing the school and local cultural context in which the teachers teach. Some citations showing concerns of participants on the approaches of PD providers are listed below.

PD providers intend to bring cosmetic change. They try to implement something with the assumption that it is working in some other context. However, it does not happen here. Now a teacher in this context is in very ABC of knowledge. When a teacher is unable to speak English, for example, how can you make him apply a communicative approach to the language acquisition? (Junaid, Government Sector Teacher)

Facilitators talk about ideal situations while the conditions in schools are very different. They [PD providers] try to implement ideas and theories of USA, England and Canada. There is a hell of difference between them and us. When there is no space to move the chairs of students in the classroom, how can we implement the concept of cooperative group work? (Munaza, School Leader from the Private Sector)

No one conducts need analysis to understand in which area or subject teachers need training. PD providers do not go to the field to identify what are the challenges and issues of the teachers and what they need. So, the main reason of less impact of training is that they are not informed by the needs of teachers. (Hammad, Government Sector Teacher)

The extracts presented above indicate that the PD programmes arranged for teachers in the research context are inadequately informed by the needs of teachers and realities of the schools in which they teach. The low level academic and professional background of teachers, their limited and experience and the overcrowding in classrooms are just a few examples which PD providers fail to consider. As represented in the view of Junaid, a teacher who has very limited academic and professional background may not be able to apply the communicative approach to learning or other creative skills to students that the PD programme is promoting. This perspective is supported by Avalos (2011) who asserts that the starting point for a teacher in Namibia and another teacher in Canada may not be the same. Teachers in different contexts have their unique strengths, interests and needs and a PD programme should build on those background factors (Avalos, 2011; Bransford et al., 2005; Guskey, 2003b). Instead of importing ideas from high performing countries, PD providers need to analyse and address those particular needs of the teachers (Darling-Hammond & McLaughlin, 2011; Guskey, 2009; Guthrie, 2014; A. Kennedy, 2014b). Just imposing standards upon teachers is less likely to have an impact on their development (Hilton et al., 2013).

PD providers acknowledged the fact that their programmes are not fully aligned with the immediate needs of teachers. However, they referred to some of the initiatives carried out to identify the needs of teachers and to design PD programmes accordingly. Inayat, a representative of PD providers, reported that when their organisation was established in the research context back in 2003, they conducted a baseline study to identify the needs of teachers. One of the needs identified then was multi-grade teaching that the teachers frequently referred to as an effective PD. However, as he further stated:

It was long ago, and the needs of teachers might have changed since then. Although we have been advertising our courses, for the last three years we do not have a positive response from teachers. Perhaps their needs have changed because of the changing needs of students.

Amjad, representing providers of PD, reported that they circulate a training need assessment (TNA) form to schools at the beginning of each academic year. School leaders are expected to identify the needs of teachers and to return those forms to the organisation. However, as Amjad said:

The issue is that all school leaders and teachers do not understand its importance. They just fill it as a formality and consider that it is for commercial purposes.

PD provider organisations felt the importance of assessing the immediate needs of teachers and took some initiatives, such as circulating the TNA to schools to be filled by the school leaders. However, this approach seems unlikely to produce the intended outcomes. The school leaders might not possess the required capacity to assess the immediate needs of the teachers systematically. A significant question arising in this situation is: why is it that PD providers do not visit schools personally to identify the needs of teachers? This question raises issues related to the resources and coordination that are addressed in detail in Chapter Five (Contextual Factors). The following section presents and interprets data on another core feature that makes PD effective and valued for stakeholders in the research region: content and pedagogy focused PD.

4.3.2 Content and Pedagogy Focused PD

Whether content or pedagogy should be the focus of PD was a debated topic that divided opinion. The majority of the participants interviewed for this research stressed the importance of content for teachers in the research region owing to many reasons. Participants revealed that in the public sector, school curriculum had been revised by adding new concepts and shifting the medium of instruction from Urdu to English. Teachers, particularly the senior ones who had joined teaching profession with a little academic background or preparation faced many challenges in teaching the revised curriculum. Afzal, SDEO, stated that:

Now a teacher who was hired 20 years back has very little understanding of those new additions. When they do not know the English words and terminologies, how can they explain them to the students?

This view was supported by the teachers who acknowledged that they were not prepared for the revision in curriculum highlighting the challenge of finding English equivalence for the Urdu terms in Mathematics and Science. Consequently, PD in content knowledge was reported as a high requirement for the teachers.

School leaders provided yet another justification for content knowledge focused PD. They believed that a command over content enhanced the confidence of teachers. They were of the view that students of today are very sharp and pose very challenging questions to the teachers. Wasif, a school leader in the private sector, reported that:

The teachers who have low content knowledge do not allow students to ask questions. Such teachers hesitate to teach able students, and students also realise the weakness of those teachers. Students are more satisfied with the teachers having strong content knowledge.

This view reveals an interesting insight that in these contemporary times students even in remote and rural areas can pose a challenge to teachers, particularly demanding greater content knowledge. This scenario lends weight to the argument that teachers having an inadequate

capacity and preparation to teach are less likely to meet the needs of today's students (Bransford et al., 2005). Thus, coupled with the revision of the curriculum, the enhanced capacity of students necessitates improved content knowledge for teachers in the research region. Consequently, effective PD for teachers was the one that contributed to their enhanced content knowledge (Garet et al., 2001; Shulman, 1986).

There were quite a few examples of content being part of the existing PD programmes in the research region. One example was the Certificate Course in Primary Education offered by the Mountain Institute. Teachers who had attended this programme reported that it was effective on the basis of its focus on content knowledge. Abid, a primary level teacher from public sector, for example, stated that:

Since the curriculum was revised, we had been facing many issues in the content of English, Science and Mathematics. Some of the newly added content was not clear to us. Moreover, we did not know English corresponding words for many Urdu terminologies. Primary Education course helped us in overcoming many of those content issues.

Support for content focused programmes was also coming from the evaluation forms of PD programmes filled in by the participants. Teachers attending primary education programme had shown greater satisfaction owing to its focus on content. A participant had recorded on the evaluation form that:

Attending this course, we learnt many new concepts in different subjects which we were not familiar with. Now I will be able to explain these concepts to my students more confidently.

This finding is supported by literature that when a PD programme focuses on the real issues of teachers, it has a greater possibility of not only motivating teachers (Hunzicker, 2011) but also implementing the learnt ideas in the classroom (Desimone et al., 2002; Garet et al., 2001).

The majority of teachers, school leaders and officials from the education department, however, were of the view that the existing PD programmes offered in the research context mostly focused on pedagogy aiming at providing teachers with general teaching concepts and methodologies. They attached less value to general pedagogy. Some representative quotes given below illustrate the dissatisfaction of these participants with the existing PD programmes because of their failure to focus content knowledge.

What is in practice, we cannot say is effective. Trainings are conducted, but the content is not focused. Content is the need of teachers. General methodologies such as cooperative learning will not help teachers in resolving their content related issues. (Nazia, ADEO)

In most of the training programmes conducted for teachers, content knowledge is not focused. Trainers just present various theories such as Bloom's taxonomy, multiple intelligence and classroom management. When teachers lack content knowledge, the methodology is not helpful. The methodology is to polish content. (Junaid, Government School Teacher)

PD providers should identify complex concepts and content and include them in their training so that teachers would enhance their content knowledge. (Kashif, Private School Leader)

The data presented above lead to two main conclusions. Firstly, there is a mismatch between the immediate needs of teachers and the focus of the majority of the existing PD programmes. Whereas the majority of the participants highlight the importance and need of content knowledge, the focus of PD providers has been on general pedagogy. These programmes, consequently, not only fail to address the immediate needs of the teachers but also lead to the dissatisfaction of stakeholders with the existing PD programmes.

Secondly, the education department introduces changes, such as revisions in the curriculum, without developing the capacity of teachers to implement them. Simply revising the curriculum and shifting the medium of instruction may not produce intended outcomes unless those who implement it possess the capacity to adopt the change. It suggests that there needs to be a more intentional alignment between the government imposed curriculum revisions and PD provision both in focus and scope.

Whereas the majority of participants in the research region stressed the importance of content, there were also strong views supporting pedagogical knowledge and pedagogical content knowledge (Shulman, 1986; Timperley & Alton-Lee, 2008). The importance of pedagogical knowledge was particularly highlighted for the private school teachers. It was revealed that professional qualification was not a condition to enter the teaching profession in the private sector schools in the research context. Consequently, many teachers serving in the private schools lacked any pre-service teacher education. Ashraf, representing a PD Provider organisation, stated that some teachers in the private sector lack understanding of basic teaching concepts such as lesson planning, classroom management, multiple intelligence, individual differences and so on. PD on pedagogy is important for the development of those teachers. This perspective was supported by many teachers representing the private sector who reported that they knew the content but lacked the skills to deliver the content to students. Private school teachers especially those who lacked any pre-service teacher education revealed that through attending PD, they learnt new ideas, terminologies, theories and various skills related to teaching which were unfamiliar to them. Some of them confessed that even the basic teaching concepts and strategies such as group work, pair work, discussions, cooperative learning and so on were unknown to them before attending in-service programmes.

Junaid who started teaching in a private school narrated that when he entered the teaching profession, he started teaching the way his teachers had taught him. He was using the strategies of the teacher whom he considered effective. He further stated that when he attended an in-service PD programme, he realised that he was using only one teaching strategy and even that strategy was traditional. He said:

Describe a concept to the students and make them carefully listen to you. That was effective teaching for me. We had no idea of other teaching methods till we attended PD programmes.

Then we felt that our knowledge and skills were limited. We were using the same method to teach any subject.

This representative quote reflects a general phenomenon in the private sector schools. In the region where this research was conducted, a certificate in teaching or any other pre-service preparation is not a criterion to be a teacher in the private schools. Consequently, the majority of teachers in the private sector schools are those who lack any certification in teaching. Without such qualification, individuals would naturally resort to teaching the way they were taught. Ayesha, another private school teacher who started teaching without any pre-service teacher education, shared what she learnt by attending a PD programme and how that learning shifted her beliefs. She revealed that:

Attending a PD programme, I learnt many ideas such as multiple intelligences and individual differences. Previously I had a belief that all students are the same. Now I feel that there are students of diverse intelligence in my class and I have to use different strategies to cater different intelligence of students.

The quote suggests that teachers who lack adequate preparation for teaching as well as any exposure to pedagogical knowledge in this region are unfamiliar with very basic concepts in education and teaching. For these teachers, the general theories and concepts shared with them during PD programmes altered their beliefs regarding teaching. However, pedagogy focused programmes were not helpful only for teachers who lacked any qualifications in teaching, even teachers having pre-service teacher education valued the updated pedagogical knowledge they learnt by attending in-service programmes. These teachers reported that in the pre-service teacher education, they had been provided with outdated ideas. Ijaz, a primary level teacher from the public sector reported that:

In our pre-service course, we had been taught that children have three categories. One is God gifted, second is who survives because of his struggle, and the third one is the one who is weak mentally. Attending an in-service course, we learnt that children have different abilities and intelligence. It is not that one child is weak rather he has some ability which we need to identify. Otherwise, it cannot be that God has created one as competent and another as weak.

Similarly, some teachers believed that there had been a dramatic change in teaching methodologies since their pre-service teacher education. Wali, a primary school teacher from the public sector, said:

There are many teachers who have not attended any in-service course since their entry into teaching. When they entered teaching profession, the teaching practices that time were different. The practices in use 15 years ago are now considered outdated. In past, it was believed that students will learn if they are punished; many teachers still hold this belief. Those teachers need to be aware of updated teaching strategies.

Labelling students as 'mentally weak' and using corporal punishment are outdated approaches which many teachers still use. Participants believed that those beliefs of teachers would be shifted by exposing them to updated pedagogies. Thus, the data showed that several contextual conditions necessitate general pedagogy for at least some of the teachers in the research

region. It is interesting to compare this finding with literature that stresses content knowledge and considers general pedagogy less helpful for teachers (Hawley & Valli, 2000). The analysis of participants' views as presented above suggests that ignoring pedagogy is in a way disregarding the needs of some of the teachers in the research region.

Some participants indicated that it is the level, capacity and needs of teachers that ought to determine a particular focus for a PD programme. These participants argued that compared with the previous procedures of recruiting teachers in the public sector, now teachers are recruited based on their performance in National Testing Service (NTS). Consequently, more competent individuals are entering the teaching profession. Participants believed that these teachers might not have a need for a focus on content knowledge, but rather, require a focus on pedagogical knowledge. Similarly, some participants reflected that content might be important for teachers at primary and middle level. At secondary level, there were subject specialist teachers who need pedagogy, not content. An example is provided from the interview of Sultan, a secondary level teacher who stated that:

I have mastered in Pakistan Studies, so I do not need further content, I need skills on how to teach Pakistan Studies.

Thus, the views of participants indicated that teachers within this particular research context require both content and pedagogical knowledge. This conclusion is supported by studies which revealed that PD focusing teachers' content knowledge and pedagogical content knowledge has greater possibility of improving practices of teachers and ultimately contributing to the enhanced outcomes of students (Givvin & Santagata, 2011; Guskey & Yoon, 2009; Ingvarson et al., 2005; Soine & Lumpe, 2014).

Participants also revealed that the focus on content or pedagogy will be determined by the level and needs of teachers which presents a case for a variety of PD programmes linked to specific groups of teachers depending on their pathway into teaching and perceived needs (Avalos, 2011; Guskey, 2003a; Timperley, 2008). This inference further supports the previous conclusion that effective PD is one that addresses the strongly felt needs of teachers and therefore, PD providers need to assess the needs of teachers before planning and implementing any PD programme.

4.3.3 Engaging Teachers in Active Learning Experiences

Active learning was another feature of effective PD frequently highlighted by the participants. The analysis of data suggested that active learning referred to those teaching learning practices where instead of presenting something only theoretically, teachers are engaged in a variety of interactive activities. As a result of analysing the views of participants, there emerged three broad categories of active learning as shown in Figure 4.3 below.

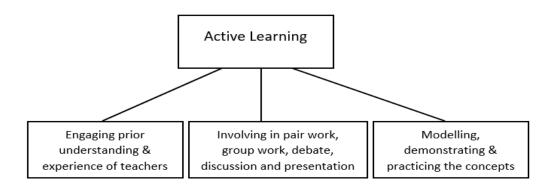


Figure 4.3 Active learning activities as perceived and experienced by participants

As shown in the figure above, participants reported that engaging their prior understanding and experience while introducing any new concepts was an effective active learning activity. Teachers revealed that in some PD programmes, facilitators encourage them to share their understanding and experience of the topic under discussion and to elicit their issues related to the topic. By building on such experiences and issues, facilitators provided them with alternative knowledge and practices. Abid, a primary teacher from the public sector who attended the Primary Education Course with the Mountain Institute, stated that:

Before starting any topic, facilitators were encouraging us to share our understanding of the topic and the issues we face in presenting the topic to the students. Such method of facilitators was effective for us to reflect on our past practices and to be ready to learn another way to approach that topic. When they value our understanding and focus our issues, it enhances our motivation.

This representative quote suggests that engaging the views and experiences of teachers not only enables them to reflect on their practices but also enhances their motivation for learning. On the contrary, teachers showed their dissatisfaction with those PD programmes where there was a failure to acknowledge their previous understanding and experiences related to the new concepts. Shamsia, a senior teacher from public sector, complained that:

In training, teachers are not provided opportunities to share their experience and issues. I have experience of working in different schools with students of diverse background. I have my own understanding and experience of how students learn and what issues we face in making them learn. Trainers mostly share their own theories without taking input from us.

Teachers reported that their personal experiences as teachers have resulted in an enhancement of their knowledge concerning how learning happens. They want this accumulated experience, knowledge and understanding to be recognised and built upon instead of simply transferring new theoretical knowledge to them. Earlier studies also support this perspective, showing that teachers enter into PD with prior experiences and perspectives which need to be drawn upon and connected to new learning opportunities (Dadds, 2014; Darling-Hammond, Hammerness, et al., 2005; Knowles, 1973; Lamb, 1995; Nicolaidis & Mattheoudakis, 2008). Learning happens if the existing taken for granted assumptions of teachers are challenged by demonstration of alternative practice (Timperley, 2008) or new theoretical perspectives. If the preconceptions of

teachers are not engaged, they either fail to learn or revert to their prior practices supported by their preconceptions even if they learn for a test (Hammerness et al., 2005). The teachers in this region were not different in their felt needs in this regard.

The second category of active learning activities shown in Figure 4.3 that was reported by participants was engaging teachers in interactions with other participants in pair work, group work, debates, discussions, presentations and other interactive activities. Participants revealed that their learning was enhanced when they were involved in such interactive activities. Fayaz, a public school teacher, reported that:

In some PD programmes, we are involved in group work, discussions and presentation. We learn a lot from others while working in pairs and groups. When we are engaged in discussions, we raise our issues and find a solution for those issues from other teachers and facilitators. Presentations enhance our confidence. All these are not possible when facilitators just present the theory through lectures.

Participants were not happy with most of the PD programmes on the basis of their failure to engage teachers in such interactive activities. Some excerpts from teachers that highlight teachers' dissatisfaction with existing PD programmes are presented below.

Traditional approaches are used during most of the training programmes. Facilitators hardly arrange any interactive activities. Trainers remain more active while course participants are mostly treated as passive listeners. (Hammad, Public Sector Teacher)

Listening to the facilitators throughout the session was so boring for us. There were no activities to engage us. It made me realise how my students feel if I keep on talking throughout the class. (Samina, Private Sector Teacher)

The above excerpts are some examples indicating that teachers appreciate those experiences where they are involved in interactive activities instead of providing them with theories through lectures. When teachers are given opportunities to talk to each other, they learn more from the experience of one another (Avalos, 2011). Otherwise, the traditional approach of considering teachers as 'knowledge-deficient' professionals is less likely to contribute to the enhanced knowledge and skills of teachers (Webster-Wright, 2009).

The third category of active learning activities as reported by participants was being exposed to practical enactments of the concepts presented during PD programmes. Participants reported that when facilitators demonstrated and modelled new concepts and engaged teachers in practical activities and micro-teaching the learning was far more effective for them. Such activities enabled teachers to gain more practical ideas of ways to implement the new approaches and strategies in their classroom on their return. The following excerpts from interviews of participants highlighted the importance of modelling and demonstrations during PD programmes.

I attended a Maths training with the Star Institute¹² where we were provided with techniques to teach counting and problem-solving. Facilitators were doing it practically. They were teaching how to make the concept clear through using various aids. It was very good. I still use those activities with my students. (Hoor, Private School Teacher)

We were practically doing high scope concept of ECE during training, and I observed teachers implementing this idea on their return to schools. Whereas we had shared many other theories and ideas with them which were not in practice. (Amjad, PD providers representative)

When we observed facilitators giving model lessons, we learnt how to present those concepts to our students. Similarly, when we were given the opportunity of micro teaching and facilitators were observing our lessons and providing us feedback, it was a great learning experience. (Wali, primary level teacher, public sector)

However, according to participants, most of the PD programmes failed to provide such learning opportunities to teachers. It was revealed that facilitators mostly talk about the concepts instead of demonstrating or modelling them. Teachers reported that when facilitators were just presenting the theory without demonstration or modelling, it did not enable them to implement that theory in their class. The following quotes highlight those concerns of teachers.

As a result of attending PD, I know what multiple intelligence is, but I do not know how to use this concept in my class. How to identify intelligence of learners and how to provide learning materials according to that intelligence, I do not have such practical ideas. (Sohail, Private School Teacher)

We were just given theory. Trainers did not demonstrate those theories. It would have been helpful for us if they have done them practically and also given us opportunity to practice the theory in the venue. We do learn theories through attending training but how to use those theories in our classroom. We hardly get such skills. (Naz, Private School Teacher)

When there is some practical aspect in training, we do observe teachers implementing them. If just theory is presented, they are not put into practice. (Wasif, school leader, private sector)

These examples of active learning activities in PD have been highlighted in the literature. It has been found that telling teachers simply about teaching theories and strategies without modelling or integrating theory with practice barely lead to enactment of those theories and strategies (Hammerness et al., 2005; Timperley, 2008). Instead of simply discussing what teachers might do, they require more opportunities to practice and more specific, concrete and practical examples to enact the concepts (Darling-Hammond, Hammerness, et al., 2005; Grossman et al., 2009). The more modelling and demonstrations by facilitators the greater the implementation of expected changes by the teachers (Saunders, 2014). Similarly, it has also been contended that if teachers are given the opportunity to try out new ideas during PD programmes, there is a greater possibility to implement those ideas on their return to school (Yuen- Kwan, 1998). Thus, engaging teachers in active learning activities that stakeholders consider as a significant feature of effective PD is well supported by the key educational theorists. However, the majority of PD programmes, according to the participants, failed to engage teachers in active learning.

¹² Pseudonym used for one of the two PD provider organisations included in this research.

4.3.4 Sustained PD

The analysis of data suggested that stakeholders in the research region attach high value to sustained PD programmes. As emerged from the views of the participants, 'sustained' refers to a) the longer duration of PD and b) regular and ongoing PD. Data on these features of effective PD are presented below.

4.3.4.1 Longer Duration PD

Longer duration PD refers to a PD programme which lasts for several weeks or months instead of a couple of hours or days. There was a consensus among the participants that the duration was one of the most significant features determining the effectiveness of a PD programme. Participants showed satisfaction with PD programmes that were relatively longer in duration. Teachers attached two major benefits to such programmes. Firstly, long term PD programmes allowed facilitators and teachers to work in detail on a concept. Obaiduallh, for example, who had attended a primary education course, stated that:

The Mountain Institute trainings are effective because of their longer duration. Long duration allows the facilitator to present a topic in detail and to engage participants in a variety of activities. We spent a whole day on developing a lesson plan, and we were also given an opportunity to present our lesson plan formats. Since we spent sufficient time on this topic, we learnt the skill of developing a lesson plan.

Teachers also reported that in long duration programme they are engaged in active learning activities which help them to gain practical ideas to implement in their classroom. Ijaz, a public school teacher who attended a long term course, revealed that:

Actually, we need such ideas that we could implement in our classroom. In long term programmes, facilitators demonstrate some concept and then give us the opportunity to practice that idea. Such practical activities provide us ideas which we implement in our classroom. For example, in social studies, facilitator demonstrated how to use a globe, and then we were given an opportunity to locate different places on the globe. I am using this idea with my students, and they love it.

School leaders also showed satisfaction with long term PD programmes. They revealed that they had observed improvement in the practices of those teachers who attended long term programmes. Kashif, a private school leader, indicated that:

There has been a shift in the practices of one of my teachers who attended a long-term PD programme. When that teacher returned, I observed him shifting from theory to practical teaching. His lesson was more interactive after that programme. I feel that in long term programmes, instead of just presenting theories, teachers are provided with practical ideas which they use in the classroom.

Thus, the data indicate that participants are more satisfied with long term PD programmes. A longer duration programme allows facilitators to spend sufficient time on a particular topic through demonstrating and modelling the theories and engaging teachers in interactive activities. As a result, teachers develop deeper understandings of the concepts as well as equip

themselves with practical ideas to implement in their classroom. This result is compatible with literature which reveals that teachers require sufficient time to learn and absorb new knowledge which necessitates a sufficient number of contact hours (Guskey, 2000; Opfer & Pedder, 2011a). Garet et al. (2001) have found that it is the duration rather than the type of PD which makes it effective. The traditional type of PD such as workshop can be effective if it is long in duration. They have also found that if PD is longer in duration, there is a greater possibility of active learning opportunities and focusing content. In this way, long duration enables the other core features of effective PD.

As noted earlier, only a few PD programmes in the research region last for two weeks, the majority ranging from one day to five days. ADEOs complained that when teachers are expected to implement the revised curriculum, only a few days' sessions are available to prepare them for the significantly large and demanding task. Nazia, ADEO stated that:

Teachers have to learn the content of the new curriculum and methodology to present it to multi-grade classes. How can they learn all these in three days? It is totally impossible.

The quote suggests that teachers require support not only in enhancing their understanding of the revised content but also in pedagogy to teach the revised curriculum. A bigger challenge is to make the content understandable to the students in multi-grade classes. Consequently, the needs of many teachers in this research region were too high to be addressed through the existing short term programmes.

Participants attached many other drawbacks to short term PD programmes. Teachers reported that in short duration programmes they were presented with only theories which had no positive impact on their practices. They also showed concern that in short duration, they were not given opportunities to practice the theory in the venue. Facilitators rush and try to cover many topics in short time through lecture methods. Some excerpts taken from interviews of teachers highlighting these issues are presented below.

The duration of training is very short while the burden is high. The effort is made to gain more in short time. Stress is laid on completion, not on comprehension. Therefore, participants forget most of the things. Because of the short time, they have limited participation and motivation. (Hammad, Secondary Level Teacher, Public Sector)

A teacher is invited for a two days programme from Khot [a very remote village in the context]. She reaches town very tired. What could she learn in two days in such situation and what she will take back to her school to implement? (Younus, School Leader, Public Sector)

The former quote suggests that the focus of the facilitators is on covering maximum topics in a short period instead of allowing deeper understanding through spending sufficient time on some particular concept. This approach puts extra burden on the teachers restricting their participation and motivation. Similarly, as highlighted in the second quote, the area is geographically scattered. It requires time and energy for teachers to get to the training venues from remote

areas. Participants are doubtful about the impact of a two-day session on the knowledge and practice of those teachers.

Thus, as emerged from the views of participants, most of the existing PD programmes fail to meet the needs of teachers particularly because of their short duration. The time allocated did not allow facilitators to demonstrate or model some concepts and to engage teachers in active learning activities. Because of the short duration, teachers were mostly provided with theories through lectures which barely allowed them to develop a deeper understanding and to gain practical ideas to implement in their classrooms. Subsequently, the short term 'style shows' (Ball & Cohen, 1999) were less likely to contribute to the enhanced practices of teachers. Stakeholders, therefore, have noteworthy concerns as to whether releasing teachers for such a PD programme is worth the sacrificing to their classes.

4.3.4.2 Regular and Ongoing PD

Whereas participants attached high value to long duration programme, they were also of the view that PD programmes for teachers should be regular and ongoing. It was revealed that the issues and needs of teachers in the research region were too many to be addressed through a one-time and short-term PD programmes. The reduced academic education and preparation of some of the senior teachers, the outdated pre-service programmes, the revision in the curriculum and the enhanced capacity of students were reported to be the factors that necessitated regular and ongoing learning for teachers. A few representative quotes from participants on the need and importance of regular and ongoing PD programmes are presented below.

Given the diverse needs of teachers and their reduced capacity¹³ and preparation as teachers, PD should be in a running condition like a machine. The occasional programmes are not sufficient to address the growing needs of teachers. (Kashif, School Leader, Private Sector)

As we have observed if there are frequent courses, they have a greater impact upon the practices of teachers. Occasional short-term PD programmes have no impact upon teachers. For effectiveness and sustainability, the continuation of courses is very important. (Nazia, ADEO, Public Sector)

The data demonstrate that given the reduced education and preparation of teachers as well as their varied needs, stakeholders, especially school leaders and ADEOs are less satisfied with the existing brief and sporadic programmes. The quotes also suggest that compared with teachers occasionally accessing PD, teachers having frequent exposure to PD opportunities are more likely to demonstrate improved practices. Consequently, participants attach high value to

¹³ As emerging from the views of the research participants, 'reduced capacity', in this research is used to refer to teachers' little academic background and preparation as teachers.

the continuity of PD programmes, a feature of PD much highlighted in educational literature (Ball, 1995; Garet et al., 2001; Guskey, 2000; Hawley & Valli, 1999; Opfer & Pedder, 2011a).

It was surprising to note that the majority of teachers in the research region lacked access even to those brief and sporadic programmes. An excerpt from the interview of Sardar, a public school leader, elucidates this issue who stated that:

I am in this school for the last six years, and only one of my teachers availed training during those six years. I am in public sector for the last 33 years. Only once I attended a six-day course on the teaching of English.

This quote represents a general phenomenon especially in the public sector in the research region where teachers have very limited access to PD opportunities. It was also revealed that many teachers in the public sector have not attended any in-service course in their whole career. This would appear to be supported by previous studies in Pakistan revealing that many teachers have not had any in-service teacher education in their whole career (G. R. Memon, 2007). The data is quite surprising given that the TALIS¹⁴ report on teachers in 23 countries (OECD, 2009) showed that on average almost 89% of teachers were engaged in some PD.

Although participants highlighted the need and importance of regular and ongoing PD for teachers, it was interesting to note that in their interviews, no references were made to any opportunities or possibilities of learning in the workplace or school context. While talking of regular and ongoing PD, participants associate them with external workshops. When the researcher deliberately turned the discussion to school-based learning and asked what internal learning opportunities teachers have, some participants shared a few examples from the private schools. Such activities reported from two private schools were school leaders observing lesson of teachers and discussing classroom related issues in meetings. Teachers serving in these schools commented that they benefited from their school leaders as they provided relevant support to address their emerging classroom issues. Naz, a teacher from one of the private schools, reported that:

We learn a lot from our principal. When she observes our classes, she notices those aspects which we cannot notice. Then she tells us about different strategies of teaching and handling students. We also conduct meetings where we openly share our issues and ideas. We learn from such experiences.

This excerpt highlights examples of school-based learning from a private school where teachers learn as a result of classroom observation and feedback as well as sharing issues and ideas in staff meeting. Similarly, some of the participants reported that in one of the private schools included in this research, there was a culture of sharing and learning from one another. Interestingly, in this school, teachers themselves take the initiative for their learning. Junaid and

96

¹⁴ An international survey of teachers' views on six areas related to education.

Asad who had experience of working in that school reported a collaborative learning culture where various subject teachers discuss their content and classroom related issues. Junaid remarked that:

In the Eagle School [pseudonym used for the school where such culture existed], we were openly sharing our issues and taking support from senior and specialist teachers. I confess that what I have learnt in that school I have not learnt attending any formal training.

Given that teachers have very limited interactions with one another for learning purposes in the research region (Nawab, 2011, 2014), the evidence from this school is quite unexpected. The views of teachers as presented above suggest that wherever such cultures and structures exist, teachers benefit from those opportunities. This finding is well supported by the educational literature (Darling-Hammond, 2004; Easton, 2008; A. Hargreaves & Fullan, 2012; Hunzicker, 2011; Postholm, 2012). However, these were a few such examples from only some private schools while the majority of schools in the research context lacked such structures and cultures. Most of the participants interviewed for this research commented that they have hardly observed school-based learning activities. Given below is a representative quote from the interview of Rashid, a senior teacher working in the public sector who stated that:

Teachers coming together for their professional learning is very uncommon. At least it is not happening in public schools. You may ask the meaning of a word from another teacher while going to class. However, some formal processes for learning such as observing classes of one another, sharing ideas and materials, and discussing classroom issues, such culture is not there.

Although the majority of the participants negated the existence of any forms of school-based learning, they associated many benefits with holding such learning opportunities inside schools. Some of the participants reported that developing structures and cultures for school based learning would be helpful to enhance their content knowledge, an issue frequently highlighted by many teachers as presented earlier. Participants believed that in schools there were subject specialist teachers who would support other teachers in solving their content issues. Similarly, some participants considered school-based activities cost effective given that teachers cannot avail external PD opportunities when they involve cost. Thus, the data suggested that if initiated, school based learning opportunities will be helpful to address the strongly felt needs of teachers through utilising their own capacities as advocated by scholars (Fullan, 2002).

A significant question at this stage was how to initiate such culture? Some participants viewed that developing such structures and cultures will be possible in government middle and secondary schools because of the sufficient strength of teaching staff in these levels. The shortage of teachers in primary schools was considered a challenge in school-based learning. Afzal, SDEO from the public sector remarked that:

It will be possible in middle and secondary levels. Now the strength of teachers in these levels is further increased. Many teachers have free periods who can come together for sharing. Even the free teachers will observe classes of other teachers. That is possible.

Participants believed that the intervention of external sources would be required to take such initiative. They have either to intervene in schools to initiate this idea or to develop school leadership in creating such structures and cultures. Sharifa, a female teacher from public sector, reported that:

Someone, external professionals, have to initiate this idea. They have to come to our school and support us in starting such activities. Most of our teachers want to improve themselves, but we lack opportunities. We have sufficient time in school, but we do not know how to benefit from one another.

The data suggest a need, possibility and potential for professional learning opportunities inside schools. Schools, however, lack internal capacity in this regard. Participants recognise that they need the intervention and support of external sources to initiate and sustain learning cultures and structures for teachers in the school context. This finding resonates with earlier studies from the research region (Nawab, 2014; Tajik, 2008) as well as from other countries (Holloway, 2000; Timperley, 2008) that external intervention is required to connect schools with emerging knowledge base and to enable them to initiate learning activities in order to build their internal capacity. If so, teachers in the research context may have access to regular and ongoing PD.

4.3.5 Regular Follow-up Support

Transferring and implementing theories learnt in the training venue to quite dissimilar contexts is a complex and challenging process. It has been revealed that at this implementation stage, teachers encounter many issues and look for ongoing support to address those emerging issues (Lamb, 1995; Pyle et al., 2011). Follow-up support is found to be an effective strategy in enabling teachers to address those issues and confusions and to successfully implement their learning (Fields, 1990; Guskey, 2002; Ramatlapana, 2009). Data emerging from the current research also supported this perspective revealing that the availability or otherwise of follow-up support highly determined the effectiveness of any PD activity.

Staff from the Mountain Institute reported some examples of extending follow-up support to the trainee teachers of multi-grade course, a PD programme offered at the Mountain Institute for primary level teachers. The staff who visited multi-grade trained teachers reported that the project was very successful because of their follow-up support to the teachers in their respective schools. Inayat, a PD provider, stated that:

We have observed a welcoming change in the classroom routines and practices of multigrade trained teachers. You can see a big difference in those classes. The interactive teaching practices that the teachers use, the decoration of classrooms and the confidence of students are such achievements which cannot be observed in any other schools. We feel that it is because of our ongoing support to those teachers. We visited them frequently and helped them in implementing ideas shared with them during our training.

The common observations in the research region show that teaching learning practices of teachers attending PD programmes barely change. The improved practices in multi-grade project schools as reported by the Mountain Institute staff are an exception in this regard. There might be other reasons behind those improved practices; however, the Mountain Institute staff associate this achievement with their follow-up support. This belief echoes in the views of the teachers who received such support. Those teachers were of the view that the visit of PD providers to their schools not only encouraged them to implement their learning but also helped them find solutions to their emerging issues. Sharifa, a teacher from public sector, stated that:

When the trainers visited my school, observed my lessons and talked to me, it was very encouraging for me. I felt that we are given importance. I had also been facing some issues in implementing my learning which I shared with the trainers. They shared many other strategies with me and also provided a model lesson. It was so helpful to see them teaching in my class. My students were also very happy to interact with the trainers.

This response highlights several benefits of follow-up support. When PD providers visit their schools, teachers are encouraged and feel valued, factors closely aligned to minimising frustration of teachers during the implementation stage (Pyle et al., 2011). Moreover, teachers face issues while trialling with new concepts and the timely support by PD providers helped them to address those emerging issues (Ramatlapana, 2009). In addition, the model demonstration lesson especially in a real situation is a highly effective way to help teachers understand and use the new practice (Gulamhussein, 2013; Knight, 2009). Consequently, follow-up support facilitated teachers to implement their learning and to bring improvement in their practices.

However, the multi-grade course was the only programme with a follow-up component. Teachers attending other PD programmes did not receive such support from PD providers. The majority of the participants showed concern stating that when a PD programme finishes, the chapter is closed and there is no one to support them to implement their learning. Teachers highlighted many issues resulting from the lack of follow-up support. Some teachers reported that facilitators talk about an ideal situation, but when they return to their schools, the classroom situation varies significantly from the training venue. Naz, a teacher from the private sector, stated that:

Most of the ideas which the facilitators share with us are difficult to implement in the classroom. For example, when I encourage students to participate, sometimes the class becomes very noisy. I cannot make them quiet again. Facilitators have to visit and help us to address those issues which emerge when we try to implement some new idea. When there is no one to help and encourage us, we use our traditional way of teaching that is helpful to maintain discipline in the classroom.

Teachers may implement their learning without any follow-up support provided they are well prepared to address the emerging issues during implementation. However, as the above reports

from teachers suggest, the existing PD programmes are often theoretical, and teachers face difficulty in applying many of the ideas in their classroom. A noisy class may be a learning class (Christensen, Johnson, & Horn, 2008); however, for teachers in this context, a quiet class is necessary to maintain the so-called discipline. This is the stage where they need to know what they require to do to be successful (Hawley & Valli, 2000; Nicolas, 2006). Otherwise, once teachers feel that the new ideas bring further challenges for them and there is no one to support them in the difficult time, they gradually return to their traditional practices (Lamb, 1995; Robbins & Wolfe, 1987).

Follow-up support for facilitating teachers in the implementation of their learning as emerging from this research is unsurprising given that the importance of follow-up has been well established in educational literature (Fields, 1990; Guskey & Yoon, 2009; Knight, 2009; D. J. Leach & Conto, 1999; Ramatlapana, 2009). Surprising is the fact that despite realising the importance of providing follow-up support, PD providers have not extended such support to their trainee teachers. Participants representing both the PD provider organisations considered resource factor to be the major challenge in extending follow-up support to teachers. Ashraf, representing PD providers, stated that:

We do realise the importance of follow-up. However, we lack time and resources to visit our trainee teachers in order to observe their classes and to provide relevant support. We feel that government and schools need to provide such support to their teachers.

A critical analysis of this representative quote brings forth several significant insights. Firstly, despite understanding the importance of follow-up support, PD providers working in the research region lack resources to make it a component of their PD programmes. It suggests that the PD providers implement the models that are imposed by their organisational leadership with little thought for translation to the classroom. Even when they know that the existing models lack some significant features, they lack power and authority to include those features. Secondly, if teachers fail to implement their learning without follow-up support, then the value of existing PD programmes becomes further questionable. In such scenarios, a prudent adjustment might be to reduce the number of their PD programmes in order to spare resources for follow-up activities. Studies suggest that providing quality learning experiences to fewer teachers is more effective in changing teaching practice than providing less quality activities to a large number of teachers (Desimone et al., 2002). Since the change in practices of teachers is found to be closely aligned with the follow-up support they receive, spending on follow-up is an effective way of achieving improved practices of teachers. Guskey and Yoon (2009) also warn that without genuine follow up and sustained support, PD activities such as the workshops which teachers attend are 'wasteful'.

The last part of the PD provider's view, 'We feel that government and schools need to provide such support to their teachers', opens another window into how PD providers and education department fail to work in coordination. If PD providers feel that their responsibility is to arrange PD programmes whereas schools and education department have to monitor the implementation of the new practices, did these stakeholders share such understanding? This contextual issue related to coordination is addressed in detail in Chapter Five, Contextual Factors Influencing PD.

4.4 Conclusion

This second part of the chapter encompassed the features of effective PD as perceived and experienced by the stakeholders in the research context. Participants reported five major features of PD. These features included:

- a) the relevance of PD programmes to the real needs of teachers,
- b) having a focus on both content and pedagogy,
- c) providing active learning and modelling of new, innovative and effective teaching practices
- d) providing programmes of longer duration including regular and ongoing PD programmes
- e) providing regular and sustained follow-up support.

Although there was some evidence to support the existence of these features of PD in the context in which this research was conducted, it would seem from these findings that the majority of the programmes fall short in these features. The existing programmes were reported to be less informed by the real needs of teachers. Most of them limited their focus on pedagogical theory, whereas participants identified content knowledge as one of their major needs. Moreover, most of the existing programmes were also reported to be theoretical where facilitators usually present various concepts and theories to teachers without engaging them in their application in active learning activities. The restricted focus of PD programmes and activities to simply transmission of new theory is largely motivated due to the short duration of the existing PD programmes. Lastly, teachers lack follow-up and support mechanisms in their respective schools while trailing with the new practices. Consequently, the existing programmes have failed to significantly impact the practices of teachers.

This chapter contributed to the bigger question of what makes PD effective for teachers through identifying the criteria the stakeholders use to determine the effectiveness of PD and documenting their experiences of the existing programmes in relations to those criteria. Consequently, the chapter revealed the design and process features of PD (Ingvarson et al., 2005). The analysis of data in this research showed that although design and process features

highly determine the effectiveness of PD, there are many contextual factors which equally influence the possibility and quality of PD. How contextual factors affect the effectiveness of PD is addressed in the next and final chapter of the research findings.

5. CONTEXTUAL FACTORS INFLUENCING PD OF TEACHERS

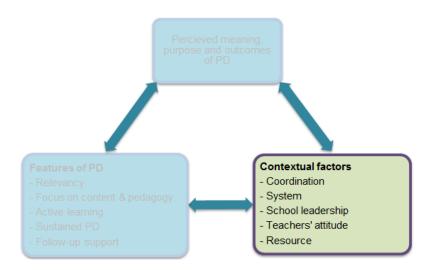


Figure 5.1 Representing the focus of the third chapter of findings

5.1 Introduction

As highlighted in Figure 5.1 above, this chapter presents and interprets results on contextual factors, which influence the effectiveness of PD for teachers in the research region. These contextual factors are related to PD providers (coordination), the system (monitoring and accountability), school leadership, teachers and resources. As represented in Figure 5.2 below, these contextual factors influence not only the translation of ideas from training venue to school context but also the possibility and quality of both external and internal PD activities.

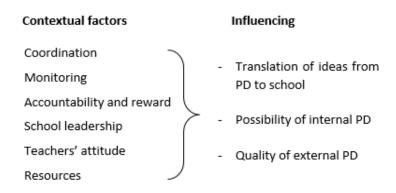


Figure 5.2 Contextual factors influencing PD of teachers

The chapter focuses on these contextual factors and the way they influence various aspects of PD. In doing so, firstly the role of PD providers in coordination is presented. This is followed by a consideration of the system (education department) and its role in monitoring and accountability of teachers. Next, the role of school leadership in PD of teachers is described. The chapter also

includes data on teacher attitude and behaviour influencing their involvement in PD. Lastly, resource issues for effective PD of teachers is also addressed.

5.2 Coordination among Stakeholders Influencing Quality of PD

Coordination between and among the key stakeholders was identified as a significant factor influencing not only the quality of external programmes but also the implementation of new learning in the classroom context. Participants interviewed for this research reported their dissatisfaction with the existing coordination mechanism and highlighted several challenges resulting from the lack of coordination among stakeholders. The majority of the participants including teachers and school leaders were of the opinion that enhancing coordination was the responsibility of PD providers because they have assumed the responsibility to intervene in the region with their reform initiatives. PD providers themselves agreed with this perspective and acknowledged the lack of serious efforts from their side to enhance coordination with other parties. Discussing the nature of coordination among stakeholders, Inayat, representing PD providers, stated that:

We have not worked seriously on coordination except we occasionally meet officials of education department asking them to send teachers for our PD programmes, and sometimes we invite them to attend ceremonies at the closure of PD programmes. But sitting together at the beginning of the year, formulating common goals and developing strategies together, it is not happening. Similarly, we have no linkages with other PD providers. Sometimes we are working on the same topic. But we do not sit together to determine who will do what. It is very much needed but no one has taken such initiative.

This quote from a PD provider is representative of a shared opinion and provides a comprehensive view of a failure to achieve coordination among stakeholders in the research region. This quote reveals conclusively that coordination is lacking or, at best, very superficial. Meeting education officials on an occasional basis cannot be considered a systematic PD coordination. It has been argued that to attain results from PD, stakeholders at all levels not only require a coordination of effort, but also need to have consensus on desired goals (Little, 1993; Louis & Miles, 1991). Through mutual coordination, stakeholders identify and agree on what they want to achieve through PD and how they might achieve them. However, as the above comment of a PD provider exposes, stakeholders in the research region lacked shared goals and coordinated efforts to achieve those goals.

Similarly, the phrase 'working on the same topic' refers to another commonly highlighted issue, overlapping of activities. It was revealed that several organisations were working on capacity building of teachers in the research region and some of them were providing similar types of PD programmes. Under these conditions, a teacher who attends a PD programme with a PD provider ends up attending the similar topic with another one. Participants reported that such

repetition is wasting not only PD providers' resources but also teachers' time. Munaza, a private school leader, showed her concern stating that:

Why the PD providers do not sit together and plan their programmes? I want to send my teachers to attend PD programmes, but when there is a repetition of the topics, it is waste of time which I cannot afford.

Given that schools in the research context have limited teachers, attending the same topic with different organisations seems an ineffective utilisation of teachers' time. The majority of school leaders and officials from the education department were of the view that coordination would also be helpful for PD providers to concentrate their efforts on specific aspects through agreeing on their areas of PD focus. For example, based on their expertise and interest, one organisation may work with teachers of English and the other with teachers of Science. They may choose various levels for their focus such as primary, middle or secondary. This being the case, participants believed that coordination would result in effective utilisation of resource.

Clearly there is a realisation by all stakeholders of the importance of coordination; therefore, the failure to take any significant initiative in this regard is quite surprising. It also lends weight to the argument that every PD provider organisation has its own internalised unique goals and agendas. Coordination requires having shared goals and their lack suggests that the PD providers might consider shared goals as a hindrance in achieving their unique agendas. Agreeing on the goals of another's organisation could be sacrificing one's preferred agendas hence PD providers reluctance to engage in such collaboration.

Whereas the lack of coordination among PD providers leads to repetition of PD programmes and ineffective utilisation of resources, participants also highlighted several issues resulting from the lack of coordination between PD providers and education department. Teachers and ADEOs made apparent that officials from the education department who visit schools were usually unaware of the purpose, content and expected outcomes of PD programmes that the teachers attended. The lack of such knowledge significantly limits effective monitoring of teacher development by education officials. Mehreen, ADEO stated that:

Even if we monitor teachers, what can we monitor? Some other organisation has given the training. We do not know what was in the training, what the content was and what teachers are expected to implement.

ADEOs expressed their concern that PD providers did not share their plan, objectives and manuals with them, so that even when they visited schools, they were unable to properly monitor teachers' progress since they were not aware of the training objectives and content. This issue was particularly highlighted by teachers who were of the view that lack of coordination between the education department and PD providers resulted in differing expectations from teachers. They reported that PD providers shared instructional strategies with them which were not fully

applicable due to the different expectations of officials from education department. Shafiq, a public school teacher, remarked that:

PD providers share with us and expect us to use interactive activities. If I use such strategies, my students may not be able to translate the text, and they will be labelled weak. I teach the way ADEOs evaluate my students, and that is contradictory to what we are taught during PD programmes. It is very confusing for us, whom to follow?

The impact of the lack of coordination between PD providers and education department officials who monitor teachers is illustrated clearly in this view of the conflicting agendas and challenges which teachers face, namely, a lack of shared understanding on student learning outcomes, effective teaching and philosophies underpinning teaching practices and strategies to facilitate learning. PD providers intervene to encourage teachers to use child-centred teaching and learning approaches. Education department officials, however, have a different orientation to teaching and learning processes. For them, effective teaching seems to be the one that enables students to translate text from one language to another. Their differing orientation to teaching and learning practices ultimately generates confusion for teachers when they attempt new practices (Hollingsworth, 1999).

It was evident from the views of teachers and school leaders that due to a lack of coordination, selection of teachers for PD programmes was also problematic. Sometimes PD providers ask the education department to nominate teachers for PD programmes. The education department provides names of teachers without considering the relevance of the programme to the needs of the selected teachers. Sardar, a public school leader, stated that:

One teacher has got ten times training and he will be called for the next training as well. Another teacher has not got any training, and he will not be given opportunity even in the future. Similarly, a Science teacher is called for English training, or a secondary teacher is called for a primary level training.

This concern of a school leader highlights several issues resulting from the lack of coordination. The Education Department either lacked records of who attended PD or did not care about who had benefited from the previous opportunities. Consequently, some teachers have availed many opportunities while others may not get access to PD even in the future. Similarly, lack of coordination also resulted in sending teachers to PD which was irrelevant to them. When a Science teacher attends teacher education programme on teaching of English, he or she is unlikely to bring back ideas to implement in her class. Again, poor coordination between PD providers and the education department appears central to inappropriate selection of teachers for PD.

The majority of teachers and school leaders were of the view that if PD providers interact with school leaders to identify the issues their teachers face and discuss a possible time to conduct PD programmes, both parties will benefit. School leaders expected PD providers to plan their PD

activities in consultation with them to allow releasing relevant teacher for PD programmes. School leaders further intimated that when they lacked awareness concerning the content of a PD programme, they did not know what the teachers needed to implement as a result of attending PD.

There seemed a consensus among the research participants that all parties including PD providers, education department and school leaders need to form a planning group to discuss the issues confronted by teachers and then collectively plan to address those issues. The focus of PD, as well as the roles and responsibilities of each party, needs to be made clear, and then stakeholders need to agree on playing their assigned roles. Thus, stakeholders envisage a coordination model between and among PD providers, education department and schools as represented in Figure 5.3 below. Research also suggests that the desired results of the PD could be achieved with such coordinated efforts (Anson, 1994; Lalitha, 2005).

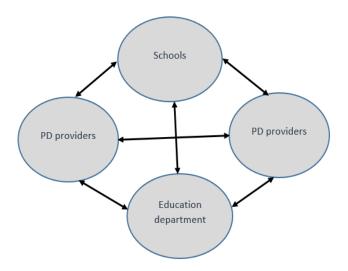


Figure 5.3 An approach to coordination envisaged by stakeholder

To conclude this section, lack of coordination among key stakeholders as reported from other research undertaken in Pakistan (Hunzai, 2009; UNESCO, 2006) permeates in this research context, resulting in many issues in relation to teacher engagement and ultimately influencing the quality and productivity of the outcomes of PD. PD programmes offered by different organisations usually overlap causing a waste of resources and time. Moreover, education officials responsible for monitoring teachers are unfamiliar with the objectives, content and outcome of PD programmes that the teachers attend. PD providers and educational managers have conflicting expectations from trainee teachers creating confusion for them in implementing new practices. Similarly, lack of coordination also results in the selection of teachers for irrelevant PD programmes. Collectively, the issues emerging from lack of coordination lead to less effective PD opportunities for teachers.

5.3 System Related Factors Influencing PD

This section presents and interprets data on system related factors namely monitoring and accountability which influence PD of teachers in the research region. First, data on monitoring are presented and interpreted.

5.3.1 Monitoring

Monitoring was found to be a significant contextual factor influencing the quality of PD in the research region. It was revealed that the public and private sectors have their unique monitoring systems. Private schools are mostly owned and managed by individuals who either work as principal of their respective schools or employ other individuals to lead the school as principal. Thus, monitoring of school practices is the responsibility of school leaders in the private sector. Private schools lack any other formal monitoring body. However, there is another type of private school in the research region called the Aga Khan Schools. Administered by the Aga Khan Education Service (AKES), a unit of the Aga Khan Development Network (AKDN)¹⁵, these schools usually operate in remote areas of the region where children lack access to public schools. Unlike the other private schools, AKES has a monitoring system where a team of professionals supervises teaching and learning processes in the Aga Khan Schools.

In the public sector, DEO, SDEOs and ADEOs are responsible for monitoring school practices. The findings of this research, however, indicate that teachers and school leaders were not satisfied with this particular existing monitoring system. Most of the teachers representing the public sector reported that officials from education department seldom visit their schools. Even if they come to their classroom, the time spent is very limited. Shafiq, a teacher from the public sector, reported that:

DEO visiting schools is very uncommon. I have not seen him ever entering my classroom. SDEO and ADEOs may occasionally visit class but they do not observe teaching. They may just enter the class and ask students some questions. They do not ask us what we learnt from training and what we need to implement and what challenges we face in the process of implementation.

This view represents a general concern of teachers from the public sector that officials rarely monitor their practices once they return from attending PD programmes. Although SDEO and ADEOs occasionally visit teachers, they demonstrate little concern regarding which teachers attended PD, what they learnt, as well as what and how they implement their new understandings. Teachers expect more support from their respective officials in addressing their emerging issues during implementation given that PD providers are largely unable to extend

108

¹⁵ Founded and guided by His Highness the Aga Khan, the Aga Khan Development Network (AKDN) brings together a number of development agencies, institutions, and programmes that work primarily in the poorest parts of Asia and Africa.

such support. However, the occasional visit of these officials and their limited stay in schools is unlikely to address the issues of teachers.

Similarly, school leaders representing the public sector also expressed their concern regarding the poor standard of the monitoring system in the public schools. They were of the view that just providing teachers with PD opportunities was not enough unless they were systematically monitored to implement their learning. Arifa, a school leader from the public sector, stated that:

More importantly, monitoring of the teachers should be strong. It should be observed and monitored whether teachers can implement their learning. If not, what is required further and how to ensure implementation. Unless teachers are properly monitored by the officials from the system, teachers will never bother to improve their practices.

This lack of proper monitoring support to teachers is not simply a matter of omission; its lack was also recognised by ADEOs who provided some insight as to why it might not occur. The major challenge in this regard was the poor provision of human resources. It was revealed that there were insufficient ADEOs to look after the number of schools involved. As Afzal reported:

I have 12 days in a month for school visits and there are 275 schools under my jurisdiction. I visit each school once in a year. There will be quite a few schools that I visit twice in a year. When I have to visit three or four schools in one day, I have very limited time for classroom observation or to discuss with teachers their issues and needs.

Where PD providers are unable to extend follow-up support to teachers, the role of education officials in monitoring the trainee teachers becomes even more important. However, could a one-off visit, or at most two visits, of ADEOs to schools in a year be sufficient to influence teachers' practices? Research from other developing countries such as Tanzania (Mbiti, 2016) suggests that teachers are unlikely to change their practices when they receive limited monitoring support from the education officials. It has also been argued that instead of brief visits by supervisors, bringing improvement in practices of teachers requires consistent monitoring and evaluation of teachers (Darling-Hammond & McLaughlin, 2011). As revealed earlier, such consistent monitoring of teaching practices was a component severely lacking in schools of the research region ultimately leading to less impact of PD on practices of teachers.

5.3.2 Accountability, Recognition and Reward

Lack of monitoring by education officials and PD providers resulted in lack of accountability. This not only hindered translation of learning from training to classroom but also influenced teachers' involvement in PD activities. Participants collectively believed that the public sector lacked a mechanism to make teachers accountable to implement their learning and to recognise, reward or reprimand them on their growth and performance. It was also revealed that the involvement in PD or otherwise did not make a difference in the career and incentives for teachers. All the teachers were treated equally irrespective of their attitude towards and involvement in PD. There

was no actual pressure upon teachers to improve their practices. A representative quote is taken from Nazia, an ADEO from the public sector, who revealed that:

Whether a teacher implements his/her learning or not, whether they improve their practices or not, no one is there to ask them. If someone attends PD programmes, there is no appreciation. Attending PD programmes or improving practices doesn't make a difference in the career of a teacher.

Teachers' commitment towards improvement is achieved through incentives based on their performance (Fullan, 2007). When the system lacks accountability and recognition and reward mechanisms, it is disheartening for those teachers who are committed to improving their practices. Sardar, a school leader from the public sector, had similar view that when a high performing teacher and his low performing counterpart are treated equally, teachers hesitate to take part in PD activities.

Coupled with appreciating teachers for their growth and performance, their commitment toward PD and implementation of their learning might be achieved through considering their capability for promotion. Participants reported, however, that teachers in the public sector were promoted to senior positions based on their seniority without considering their capacity and professional growth. Afzal, an SDEO, remarked that:

A teacher feels that no one can stop my promotion if I am the most senior. Such policy is required that if a teacher develops himself and brings improvement in his/her practices, he/she will be promoted. If performance is rewarded, it will force teachers to develop themselves. Otherwise, teachers are not willing to improve their practices.

Aligned with the earlier studies (Behlol et al., 2014; Siddiqui, 2016), promotion is largely unrelated to the actual performance of teachers in low-income developing countries of Asia including Pakistan. The performance of teachers, as revealed by the participants, was evaluated through a process called Annual Confidential Report (ACR). Participants in this study, however, reported several flaws in this system. Firstly, the existing ACR system lacked any weighting for PD of teachers. Secondly, ACRs were written confidentially by school leadership without taking teachers into confidence. Based on such system, teachers did not know their strengths and areas for improvement. In this sense, the appraisal system lacked an 'improvement function' (OECD, 2013), a function of appraisal that helps teachers improve their practices through identifying their strengths and weaknesses.

Participants representing the private sector reported a relatively improved picture of accountability in the private schools. It was revealed that student achievement in the private schools was relatively high compared to student achievement in the public sector schools. Participants reported that one of the primary reasons for better performance of the private schools was the accountability system. Support for this view comes from earlier reports suggesting that better learning outcomes for students in the private schools of North-Western

Pakistan are owing to the higher degree of systematic management control over teachers' performance (Bennell, 2004). Participants revealed that compared with the public sector, there was no job security in the private system where teachers were retained only if they performed well. It was also revealed that in the private sector, the local community put pressure on school leadership and school leadership in return put pressure upon teachers. Irfan, a private school leader, revealed that:

There is competition among private sector schools. Since parents pay for their children, they also want good results. To attract students, private schools have to prove their worth. It will be possible if teachers work hard. I want to see output from teachers. Otherwise, they will be replaced. Teachers show more dedication because they know the consequences.

This view of school leadership supports the earlier findings from Pakistan that in the private schools teachers work hard as they are held accountable by parents, and there is a risk of losing students to other schools in case of poor performance (Andrabi et al., 2008). In addition, school leaders hold authority to hire and fire teachers, which makes them more conscious of their practices and growth. On the contrary, when teachers are recruited by a central authority as in case of public schools, it becomes difficult for parents and school leaders to make them accountable (Mbiti, 2016).

Some of the participants also referred to the accountability system in the Aga Khan Schools. Inayat, a representative of PD providers, stated that in the Aga Khan Schools, the implementation of PD learning is prioritised because AKES staff systematically appraise their teachers. Teachers who develop themselves, bring innovation in their teaching and apply their learning in classroom, score higher in the appraisal. Inayat further revealed that through the appraisal system at the Aga Khan Schools, the improvement areas of teachers were identified and addressed. Consequently, the model serves both accountability and improvement functions (OECD, 2013). These functions of appraisal have also been documented through research studies conducted on appraisal system in the Aga Khan Schools in Pakistan (M. Khan, 2015).

The appraisal system, however, is carried out only at the AKES system. Such a system was lacking in other private sector schools in the research region. Although school leaders from the private sector showed growing pressure on the schools and teachers from the community, teachers representing the private schools reported the lack of any mechanism to hold teachers accountable for engagement with PD and application of their learning into practice. Razia, a private school teacher, reported that:

Our management does not encourage us to attend PD. Often they hesitate to send us for external PD saying that there is no one to engage our classes. Even if we attend PD, school management never asks us about our learning and what we need to implement. I had attended a seven-day workshop with the Star Institute. No one asked me whether I benefited from that course or not. The management needs to ask teachers before and after the course what she needed and what was the improvement in her practices after attending the training.

While the private schools exert pressure on teachers to produce better student results, as the above excerpt suggests, no systematic mechanism was in place to evaluate teachers and to make them accountable for learning and implementation. The data suggests that the private schools do want improved results for students, however, they lack realisation that student achievement could be enhanced through developing the capacity of teachers. Teachers reported that they were not encouraged to attend PD. Even if teachers attended PD on their own interest, there was no pressure on them or support to implement their learning. Attending PD appears to be a mere compliance. Ideally, once a new idea enters an organisation there should be structures and cultures to cascade the learning and to make it part of the organisational capacity (Lange, 2014). However, schools in this region lacked a mechanism to support implementation of new learning and to cascade it to other teachers.

Thus, a critical analysis of data presented above suggests that in the research region, lack of accountability is a significant factor that, similar to other developing countries (The World Bank, 2004), affects the quality and outcomes of PD. Teachers do make changes in their practices, but this happens largely in a systematic and rigorous accountability environment (Wells, 2014). It has also been argued that innovative behaviours are supported in an environment where teachers are appraised, recognised and rewarded based on their innovations and development (Nemeržitski, Loogma, Heinla, & Eisenschmidt, 2013; Trehan & Paul, 2014). Since these elements are lacking in the research region, it is unsurprising that teachers give reduced preference to PD. Even if teachers attend PD programmes, they are less concerned about implementing their learning mainly because of the lack of accountability. Teachers' concerns are addressed in detail under the heading of Teacher's Attitude on page 117.

If the education officials and PD providers are unable to monitor teachers and to make them accountable, what about school leadership? This question leads us to the role of school leadership in PD of teachers.

5.4 School Leadership Influencing PD of Teachers

Scratch the surface of an excellent school and you are likely to find an excellent principal. Peer into a failing school and you will find weak leadership. (K. Leithwood & Riehl, 2003, p. 64)

The role of school leadership in PD of teachers has been well established in educational literature (Darling-Hammond & McLaughlin, 2011; Day, 1999; K. Leithwood, Leonard, & Sharratt, 1998). Leadership contributes to the PD of teachers through capturing a vision for the school, creating learning opportunities, providing required support and offering intellectual stimulation (K.

Leithwood et al., 1998; Silins, Mulford, & Zarins, 2002). Stakeholders in the research context were also mindful of the significant role of school leadership in PD of teachers. They were of the view that school leaders can support teachers in their development through identifying external PD opportunities, monitoring teachers in implementation of their learning and facilitating school based learning opportunities.

The majority of teachers in this study were doubtful of the potential for improved uptake of PD and translation of PD into classroom practices owing to the existing role of school leaders. It was revealed in this research that teachers miss opportunities of external PD due to the inattention of their school leaders. Teachers intimated that although there were several PD opportunities for teachers organised by various PD providers, the school leaders did not encourage them to avail those opportunities. Sultan, a teacher from the public sector, stated that:

Ideally, school leaders should identify the improvement areas of teachers through observing their classes and talking to them. Then they should be in contact with education department and PD providers to organise relevant training for teachers. Our school leaders lack such attitude.

PD providers supported this perspective stating that PD of teachers was given low priority by a majority of school leaders. It was surprising to note from PD providers that school leaders hesitated to send teachers for PD programmes despite they were frequently invited. Ashraf, PD providers' representative, revealed that when they contacted school leaders inviting teachers for PD, they often failed to receive positive responses. He further remarked that sometimes they were forced to cancel a PD programme due to a failure to attract the required number of teachers. This they claimed was due to a lack of interest by school leaders. Consequently, the indifferent attitude of school leaders towards PD is one the major reasons depriving teachers of the potential benefit from the externally arranged PD programmes.

While the majority of school leaders were less interested in enabling teachers to avail external PD opportunities, schools also lacked supportive conditions to implement learning after attending the limited external PD opportunities. Hammad, a public school teacher, stated that when teachers return to schools with new ideas after attending PD programmes, school leaders did not ask what they learnt and what they intended to implement. On the basis that PD providers and officials from the education department were unable to extend the required follow-up monitoring and support to teachers, it is reasonable to assume that school leaders' exercising their responsibility of monitoring teachers should be even greater. School leaders, however, failed to demonstrate concern what teachers learnt and might need to be implemented. When there is no commitment to professional development and if school leaders are unable to provide supportive conditions, teachers are less likely to implement new practices in classrooms (Hollingsworth, 1999).

Particularly important in the context of this research is that teachers in the research region have less exposure to external PD opportunities; therefore, an alternative strategy could be to facilitate more internal learning opportunities. Recent trends in PD of teachers emphasise 'learning in the context' instead of attending one-off, external workshops (Fullan, 2002). However, if schools are to be the arenas for teachers to learn on an ongoing basis, then school leaders ought to be the architects of those arenas. As presented under the heading of regular and ongoing learning in Chapter Four (page 95), the researcher found very limited evidence of internal learning opportunities. Largely, it was limited to being evident in a few private schools where, based purely on the personal inclination of individual school leaders, occasionally leaders were known to observe classes of teachers, invite teachers to observe his/her classes and hold academic meetings. In the majority of schools, particularly in the public sector, the leadership had very limited or no contribution in school-based teacher learning.

The majority of the teachers interviewed for this research revealed that their school leaders did not take any initiative to facilitate learning opportunities for teachers inside schools. Sultan, a public school teacher, intimated that he never experienced his school leader entering class, observing lessons and providing feedback to the teachers. This perspective of teachers was supported by Younus, another senior teacher from public sector who stated that:

There are no opportunities for teachers to improve their practices inside schools. School leaders have no role in PD of teachers. They prefer to stay in their office. Sometimes, school leaders do sit with teachers in the staffroom, however, the topics for discussion are not academic. This is a common culture in our schools.

This excerpt suggests that school leaders have limited interaction with teachers. Most of the time, they stay in their offices doing administrative work. Even if they join teachers in the staffroom, they provide little attention to academic issues. School leaders exert a powerful influence upon teachers (Newmann et al., 2000) and their behaviour provides a foundation for all other behaviours in schools (Day, 1999). When the teachers see the leaders as failing to regard themselves as learners, it is entirely understandable that teachers are less likely to be involved in learning activities.

Participants in this research reported several factors that they perceived to result in the limited role of school leaders in teachers' PD. One of the major factors was found to be their lack of awareness regarding the importance of PD. As presented earlier, it was unfortunate to note from the PD providers that school leaders attach little benefit to PD, thus sending teachers for PD was considered a waste of time. Ashraf, a representative of PD providers, further highlights this phenomenon stating that:

The most important thing is to make head teachers realise that PD is important for teachers. If the principal feels that training has no importance and benefit and sending teachers to PD disturbs their school activities, then it is very challenging to motivate teachers towards PD.

This view represents a general trend in the research context where PD is not considered a prerequisite for effective teaching. When there is no perceived benefit attached to PD, releasing teachers to attend external PD is sacrificing classes which school leaders are not willing to risk. If school leaders feel that PD would result in improved practices of teachers and consequently in an enhanced achievement of students, it is reasonable to expect that they would be willing to facilitate teachers in their PD. Unfortunately, similar to findings reported from some other Asian countries such as Lebanon (Nabhani et al., 2013), school leaders lacked awareness regarding the importance of PD to school renewal.

Another reason reported by PD providers and ADEOs was school leaders' lack of understanding of their role in the PD of teachers. It was also revealed that school leaders had no exposure to ideas and skills on creating and sustaining learning structures and cultures in schools. As Siraj, an ADEO stated:

Head teachers do not know that a school is also a place of learning for teachers and they have to facilitate learning activities for teachers. They feel that they have to look after school finance and to distribute classes to teachers and that is all.

School leaders have to recognise that developing a culture of professional learning in schools is one of their central roles (Day, 1999). However, as participants believed, such realisation will not occur to school leaders unless they receive an adequate orientation to the importance and possibilities of professional learning in relation to the enhancement of teacher performance and student learning in their schools.

Some of the participants questioned the capacity of some of the school leaders to engage with the issue of teacher development and educational quality. Their views supported earlier findings from Pakistan that in public sector, instead of recruiting competent head teachers, a senior teacher was promoted to leadership position irrespective of his/her capacity (Siddiqui, 2016). Afzal, a SDEO reported that, in recent times, competent people were entering teaching profession through qualifying competitive exams and those junior staff had greater capacity than the senior staff. He questioned the capacity of school leaders who are less equipped to be educational leaders and to provide professional support for their staff than other more pedagogically expert teachers in their school. This issue was particularly problematic owing to evidence provided by PD providers and ADEOs as presented earlier that school leaders often lacked awareness regarding the possibilities of creating learning cultures in schools. It is entirely possible that a wise leader could engage competent teachers in developing the capacity of other teachers, including himself/herself. Powerful school leaders are those who are prepared to be a learner, to acknowledge what they do not know and to work with others to address what they do not know (Easton, 2008). However, as revealed by PD providers, ADEOs and teachers, school leaders in the research region lacked such attitude.

Similarly, some of the participants were also doubtful about the capacity of school leaders in some private schools. It is apparent that some private schools in the research context were established by individuals lacking professional and educational background. Ashraf, representing PD providers, was of the opinion that in order to support teachers professionally, school leaders also need to be professionally sound. He further stated that:

In some private schools, principals lack required expertise. They have opened schools for commercial purposes. They are either retired people or individuals who have no other business options. If they lack expertise, how can they support teachers professionally?

Thus, as evident from the views of teachers, PD providers and ADEOs, the capacity of leaders to promote educational practices of teachers in some public and private schools was questionable. PD has been strongly related to the capacity of school leadership (Newmann et al., 2000) so that when school leaders lack insight into their role and impact on teachers' learning, engaging teachers in PD is less likely.

The perspectives on the role of school leaders in PD of teachers presented so far came from teachers, PD providers and education department officials. This research also listened to the views of school leaders regarding their role in PD of teachers. Although, school leaders did not explicitly mention the factors highlighted by the other participants such as their lack of awareness and capacity, they revealed several other challenges in extending professional support to teachers, of which a major challenge for them was their workload. School leaders in this research context reported that they had many roles to play as leaders. Because of the limited resources and the shortage of teachers especially in the private schools, school leaders were frequently too busy to spare time to supporting teachers professionally. Kashif, a private school leader, reported that:

I have so many roles to play. At a time, I am an administrator, a teacher and a community mobiliser. These roles put my academic leadership role into the background.

This excerpt supports the common phenomenon reported earlier in the research context, namely, that school leaders play many roles at the same time (Simkins, Garrett, Memon, & Ali, 1998). Consequently, their workload is high. One strategy to reduce their workload and to develop others could be adopting an approach of distributed leadership empowering effective teachers to undertake teaching development leadership roles. However, as mentioned earlier, school leaders lacked such ideas and expertise. On the other hand, some participants were of the view that workload was not a major reason restricting the role of school leaders in extending professional support to teachers. Those participants argued that in government middle and secondary schools, there was sufficient teaching staff; however, leaders even in those schools lacked any defined active role in PD of teachers. The major issue highlighted by the majority of participants was school leaders' lack of awareness regarding the importance of PD, lack of

understanding their role in PD of teachers as well as lack of capacity to create learning cultures and to extend professional support to teachers.

Whereas some participants blamed school leaders for their limited role in PD of teachers, others including school leaders and teachers considered the policy and system responsible in this regard. Teachers having this perspective shared that unless the education department makes school leaders accountable for their role in PD of teachers, developing professional learning cultures in schools was improbable. Junaid, a public school leader, remarked that:

DEO and other education officials need to put some pressure on us. They have to make us accountable for such activities. They have to ask me whether a teacher improves his practices or not and whether I supported them in their PD or not. Once upper management makes me accountable, it is easier for me to make teachers accountable.

This view was also supported by teachers. Sultan, a public school teacher, remarked that:

Management has to issue a notice to schools asking them to plan and execute school based PD activities. Once there is such instruction from upper management, head teachers will be able to take such initiatives inside schools.

Thus, the data suggest that the education department responsible for overseeing the activities of schools and teachers in the research region also has a limited role in PD of teachers. As revealed earlier in the earlier accountability section, PD is given little credit when it comes to promotion or any incentives given to the teachers. The education department is not concerned either the teachers improve their practices or not. A strategy of increasing commitment by the department towards PD would exert influence upon school leaders to organise external and internal learning opportunities for teachers and to make them accountable. When there is no accountability in the system, school leaders may not take initiatives on their own.

Whereas the role of school leadership in the PD of teachers has been evidently emphasised in educational literature, the findings of this study presented above suggest that this aspect is largely absent in the context where this research was conducted. The views of the participants suggested that school leaders not only disregard PD but also lacked awareness on their role in PD of teachers. Some of them were also reported lacking expertise to contribute to PD of teachers. Lack of accountability in the system further obstructs school leadership in taking any initiatives for PD of teachers. This provokes the question of teachers' own agency when other factors are less facilitative for PD. This question leads us to the next section, teacher attitude.

5.5 Teacher Attitude Determining Their Engagement in PD

Attitude and behaviour are significant determinants of teachers' involvement in PD activities as well as in implementation and sustainability of ideas and skills developed as a result of attending (Fields, 1990; Lamb, 1995; Ramatlapana, 2009; Yuen-Kwan, 1998) PD. Attitudes refer to

subjective attributes of individuals (Trehan & Paul, 2014), whereas behaviour is used to refer to teachers' abilities and willingness to apply new ideas and practices (Rogers, 2003). Given that in the context of this research, monitoring and accountability from PD providers, education officials and school leadership was lacking, teachers' own attitude and behaviour towards PD were noteworthy aspects on which to ponder. Of relevance to this research was whether teachers were interested in PD in the absence of accountability and incentives. The analysis of emerging data suggested that the majority of teachers lacked positive attitudes and motivation to be involved in PD and often failed to apply their learning as a result of attending PD.

The majority of the participants were of the view that similar to school leaders, the teacher community also lacked awareness regarding the importance and usefulness of PD. The general perception in the research context as reported by the participants was that any individual could be a teacher, therefore, PD is not critical to being an effective teacher. Razia, a private school teacher, stated:

The general perception is that you can teach without training. People ask why training is needed, what is its benefit. Even very educated people say that it will work if you do not attend any training.

It has been argued that one of the most significant factors driving teachers towards improving their practices is the need for improvement and innovation (Piirto, cited in Nemeržitski et al., 2013). Since the majority of the stakeholders including the education office, school leaders and community undermine the importance of development, the perception has also influenced the view of teachers. When improvement and innovation were not encouraged, teachers might not feel and realise the need for PD. As the representative quote provided above suggested, stakeholders considered teaching an easy job and believed that teaching could be performed effectively without any teacher education. Consequently, teachers were less likely to be involved in PD activities.

Participants further revealed that some teachers were satisfied with their existing capacity. Hammad, a public school teacher, stated that:

National and global needs change, new theories and practices emerge, but some teachers are not concerned about them. They feel that they have required knowledge and skills and therefore, they do not need any further improvement. Unless this attitude of teachers is changed, teachers will not take an interest in PD.

If PD is rewarded, teachers may strive to improve their practices. It may also lead to the recognition and reward of good teachers who exhibit better teaching skills. Since teachers' capacity and skills have never come under such scrutiny, they are satisfied with their existing capacity, and this enables them to easily survive in the existing system. Consequently, teachers in this research did not feel the need for improvement. This attitude stands in contrast to 'teachers as professionals' or a 'moral purpose of teaching' (Day, 1999; Fullan, 1993);

accordingly, teachers as change agents should be committed to making a difference in the lives of students through consistently reviewing and renewing their practices.

The issue was reported to be more pertinent to senior teachers who were reluctant to change their practices. Even if they were given the opportunity to attend PD, they attended it as a formality. Sharing his experience, Shafiq, a public school teacher revealed that once he attended PD along with many senior teachers. While referring to the attitude of senior teachers during that training, Shafiq stated that:

They were telling us that we have been teaching for 25 to 30 years. We know what we need to know. Now we are tired. We are here just for some outing.

This excerpt suggests that teachers holding such view believed that their extensive experience of teaching has resulted in their improved knowledge and skills and they did not need any further improvement. In reality, the senior teachers required more PD opportunities given that both their content and pedagogical knowledge was reported to be quite low whereas expectations from teachers have changed over time. The pre-service course that they attended has been found to be outdated (Siddiqui, 2007). Moreover, the curriculum has been modified by adding new concepts and terminologies. All these scenarios intensify the need of more PD for senior teachers. However, they feel that they have required knowledge and skills and were less willing to bring changes in their practices. This senior teacher's attitude might reflect the learning curve of teachers which is reported to decrease with their increasing career stage, finally resisting learning at the very senior stage (Barth, cited in Day, 1999). Alternatively, it could also be the consequence of many years of unhelpful PD which the teachers have experienced. Whatever are the elements at play, the data suggest that the senior teachers are less interested in learning.

However, in the research context, reluctance to learn was not related to senior teachers alone. There was evidence to suggest that teachers, in general, were reluctant to improve their practices. PD providers and ADEOs reported that some teachers attended PD programmes if there was pressure from the education department, or if there was monetary benefit such as travel and accommodation allowances. The Mountain Institute staff reported that when teachers are invited to attend PD programme, they ask how much they will be paid. Afzal, SDEO further elaborated this attitude of teachers stating that:

There are some teachers who are like contractors of training. They are always following what training is going to be conducted. Whether the programme is relevant for them or not, they have to go there. Their aim is not professional development rather they want to be away from school, or there are some financial benefits attached to the training.

This view represents a common concern of stakeholders who believe that, in the research context, PD programmes are often considered as opportunities to be away from the hectic job at

school and to gain some financial benefits. Consequently, teachers who want to avail such benefits usually remain updated on the PD activities. They remain in contact with the individuals who select teachers for PD programmes. This attitude of some teachers and the selectors results in denying PD opportunities to those teachers who are willing to learn and improve their practices.

The attitude of teachers affects their involvement not only in external PD but also in school based learning activities. It was revealed in an interview with school leaders that teachers were unwilling to take part in school based learning activities. For example, teachers did not feel comfortable if their lessons were observed. Wasif, a private school leader, reported that teachers feel unhappy when someone goes to their class. Teachers ask why there is a need for this observation. Similarly, Irfan, another school leader, argued that:

Observing classes of teachers is insulting them. Teachers feel that I am not satisfied with them and trying to identify weakness in them. They do not like my presence in their class. If a teacher has some difficulty in teaching, he will not ask someone to support him through observing his class. It is because teachers do not want to show that they do not know something. Their perception is that it will surface their incompetence and they do not want to show themselves incompetent.

Classroom observation is a useful tool for understanding the quality of a teacher's knowledge and pedagogy (Putnam & Borko, 2000). It will also allow identifying the improvement areas. Teachers, however, are reluctant to be observed by others due to anxiety about weaknesses being identified and this reluctance reduces learning opportunities. Similarly, when teachers consider classroom observation as 'interference' or an 'insult', there is little possibility for them to improve their practices. It appears there is a culture of deficit thinking rather than a strengths-based approach. Trust also appears to be lacking and possibly because they are expecting others to find fault with them rather than support them or perhaps because they have a history of being mistrusted by school leaders. These are possible interpretations; however, what is certain is that teachers lack an attitude for mutual learning.

Another attitudinal issue of teachers reported by school leaders was that graduates attending private schools considered teaching as a temporary occupation. Saif, a private school leader, reported that teachers in the private schools are like 'migratory birds' and teaching in the private schools is their 'temporary shelter'. Evidence showed that teachers in private schools were mostly fresh graduates who spend time in those institutions until they are permanently employed in the public education or any other department. The incentives provided to teachers in the private schools were too low to retain them or to motivate engagement in PD. Even when attendance in PD occurred, it made no difference in their incentives or career choice. Under these conditions, the 'migratory birds' are constantly looking for another 'permanent shelter' and display reluctance to engage in PD activities that might improve their 'temporary shelter' work.

Still, because of the accountability mechanism in private schools, teachers in this sector were relatively more interested in improving their practices compared with their counterparts in the public sector.

Even though there was considerable evidence that teachers lacked a positive attitude towards PD, was there evidence of improved knowledge and changed teaching practices for some of those who did participate? Responses to this question varied among stakeholders. PD providers who have experience of observing teaching practices of the trainee teachers revealed that compared to teachers who did not access PD programmes, teachers attending PD programmes used more innovative teaching practices. Sharing his experience on the behaviour of trained teachers, Ashraf, representing PD providers, reported that observations of teaching in a school in Arandu [a valley from which teachers do not attend PD programmes] compared to observations in another school, Brep [a valley from where many teachers attend PD], produce evidence of different and improved classroom practices of teachers. He contended that this difference was due to accessing PD. Ashraf stated that:

Teachers' punctuality, innovative practices, friendly relation with students and the overall outlook of schools that you can witness in a school of Brep will never be observed in a school of Arandu. PD has resulted in such behavioural changes in teachers. However, everyone cannot realise this fact.

However, PD providers also agreed that the implementation of new learning varies between individual teachers. Some teachers bring substantial changes in their practices after attending PD; however, the majority of them continue with the traditional practices. Amjad, a representative of PD providers, suggested that in his experience, junior staff have a more positive attitude to PD and a keenness to learn and implement new ideas. Others, especially more senior teachers, attend PD programmes as a formality and are interested in neither learning nor implementing.

Although there was some evidence to suggest that, in general, the behaviours of teachers improved as a result of attending PD, school leaders were of the view that although they released their teachers for PD programmes, they observed little differences in their practices on return to school. Kashif, a private school leader, remarked that he usually observes teaching and learning practices in the classroom and he was of the view that he did not observe any significant change in practices of trainee teachers. Wasif, another school leader, had similar views. He reported that according to his observation of teachers, ideas that were the focus of PD were not fully implemented in the classroom. He further argued that if some teachers introduced some innovation as a result of attending PD, they did not sustain it. Similarly, Irfan, another private school leader was very much opposed to PD programmes on the grounds of their failure to impact the behaviour of teachers. He stated that:

As far as the effectiveness of PD is concerned, I am not happy with the implementation process. Unfortunately, whoever attend training they just acquire certificates, and nothing is applied to the classroom situation. Four of my teachers have got training from different organisations, but their practices are the same. If a teacher attends training, he/she should apply something. My personal experience suggests that training has no output. There are opportunities for teachers, but my objection is that they have no impact on the practices of teachers.

Since school leaders have greater experience of working with teachers, they have better knowledge regarding how teachers' behaviour changes as a result of attending PD programmes. Reports from school leaders suggest that the existing PD opportunities have been unsuccessful to affect the behaviour of teachers significantly. How school leaders themselves contributed to encouraging implementation of new learning is a separate question which was discussed in the preceding section.

Some of the teachers revealed that the attitude and practices of peer teachers in a school also affect trainee teachers in their willingness to implement ideas acquired from PD programmes, noting that it was relatively easier to implement new ideas in a school where other teachers also had exposure to the PD. The environment in the private sector schools was reported to be more supportive of implementing new approaches in teaching. Sharifa, a public school teacher who was previously teaching in the private sector, reported that it was easy to implement something in a private school because other teachers were cooperative and familiar with different teaching strategies. She was of the view that due to the lack of PD opportunities to teachers in the public sector, there was no culture of learning and innovation.

Literature also supports the view that teachers are less likely to implement innovations unless other teachers and the whole school environment are supportive and facilitative (Hatala & Fleming, 2007; Sahlberg, 2009). The professional and emotional support of colleagues tremendously influences the implementation process. A culture of collaboration and collegiality among teachers and their shared commitment to development results in greater possibilities of implementing course ideas (Grimmett & Crehan, 1992). Since other teachers in the schools lacked orientation to learning and improvement, it was quite challenging for an individual trainee teacher to be innovative in the teaching.

In summary, data suggested that teachers in the research region lacked motivation to take part in both external and internal PD activities. This attitude also influences their behaviour when putting their learning into practice. It has been argued that when teachers have a positive attitude towards PD they are more likely to implement their learning (Cheng, 2015; Rowold, 2007). Therefore, it is unsurprising that the majority of teachers continue with their traditional practices despite engaging in PD. If the purpose of PD is to change the beliefs and practices of teachers (Guskey, 2002), the PD programmes reported in this research have failed to achieve such changes.

Undervaluing PD, lack of accountability, reluctance to change and less facilitative environments in school were the contextual factors that influence teachers' attitude and behaviour. Although all factors are of influence in the attitude and behaviour of teachers, 'undervaluing PD' seems to be a central barrier given valuing of PD is foundational to addressing other issues. If PD is valued then accountability measures will be prioritized, and these measures will also serve to drive change that is sustained. Together such changes will result in more supportive school environments. These issues are elaborated in more detail in the discussion chapter.

5.6 Impact of Resources on Availability and Quality of PD

The lack of resources was found to be another significant factor influencing the availability and quality of PD programmes in the research context. This study identified that resource availability is a determining factor in the frequency and duration of external PD programmes, the possibility of follow up support, the implementation of learning ideas in classrooms and the initiation of learning structures in schools. PD providers in this research were of the view that limited resources prevented them from conducting regular PD, affording PD of longer duration and monitoring the implementation in schools. It was revealed that in the research context, teachers had, until recent times, been provided with external PD opportunities free of charge. Because of the resource limitations, however, together with an assumption that free programmes were less valued, PD providers were gradually shifting to charging for the PD programmes. Ashraf, a PD provider, reported that:

Previously we were providing free courses. Now the demand from upper management is that if we provide four programmes, one of them needs to be paid one. Moreover, the free courses are not helpful for teachers since they are not given value and importance. If teachers pay, they will take them seriously, and if schools pay for them, they will monitor teachers. When teachers attend free programmes, no one asks them about their learning and implementation.

While there may be some truth in the perception that free of cost PD programmes are less valued and therefore have little impact on the practices of teachers, it is also clear that resource limitation was found to be the major reason that contributed to the Star Institute changing its policy of offering free PD programmes to teachers. In future, teachers will be expected to pay for the PD programmes they attend with the Star Institute. It is notable that the other PD provider organisation, the Mountain Institute, has already begun charging for their PD programmes. Inayat, representing the Mountain Institute, reported the similar reasons forcing them to change their policy of the free of cost PD programmes. He stated that:

Ours is a private organisation, and no private organisation offers something free in this context. So far we had been receiving external funds. Now those funds have almost stopped, and even our organisation proposes that teachers should not be made dependent.

Being a private organisation and given that the external financial aid is shrinking, the upper management determining the focus and procedures of PD in the research region expects the Mountain Institute to generate revenue. The organisation also wants to discourage the culture of dependability and encourages teachers to pay for their PD with the assumption that if teachers or their respective schools pay for PD, they will be more concerned about the outcome of their input.

PD providers realised that there are challenges to requiring teachers or schools to pay for the PD programmes. Tahir, a PD providers' representative, informed that:

When teachers have been used to free of cost PD programmes, it is very challenging to make them pay. Even the government department is not ready to pay for PD of its teachers. They expect us to provide them with free courses. Neither teachers nor their system is ready to afford the course expenses.

As the excerpt suggests, teachers have become accustomed to access to PD programmes without charge, and the risk is that a sudden shift in the policy to make them pay for their PD may have negative consequences. Furthermore, asking teachers to pay for PD may not be feasible given the limited financial capacity of teachers and the low value attached to PD in the system. Participants also realised this fact. They questioned the wisdom of the change when it was already clear that teachers were not interested in attending freely available programmes. Why then, through paying for PD would they be more likely to attend PD and engage with and apply what was learned? Despite PD providers also being well aware of these challenges and realities, they were determined to change the policy. If these organisations insist to fully implement their policy of charging from teachers for their PD, it may put the future of educational enhancement and teacher development in crisis.

Both the organisations involved in the study now expect teachers to pay 10 to 20% of the total cost in the initial stage and the impact of such a shift has been predictable. Data suggested that since the Mountain Institute has started charging from teachers, there has been a dramatic decrease in their PD programmes as illustrated in Table 5.1 below.

Table 5.1 PD programmes offered at the Mountain Institute in the years 2012 and 2014

Year	PD programmes offered
	Educational Leadership & Management
	2. Primary Education
2012	3. School Improvement in Multi-grade Situation (SIMS)
	4. Early Childhood Education (ECE)
	5. Computer Literacy
	6. English Language Enhancement Programmes
2014	Early Childhood Education (ECE)
	2. English Language Enhancement Programmes

As the table shows, the Mountain Institute offered six PD programmes in 2012, the last year when the organisation offered PD programmes free of cost. In contrast, once the Mountain Institute started charging for PD programmes in 2014, only two programmes were organised. Teachers were not willing to pay for PD programmes except the ECE and English language programmes, possibly because of the growing importance of these two programmes in the research region. Another assumption may be that when teachers have to pay, they are more selective and choose to come when the programme is more relevant to their immediate needs. Resources also influence the effectiveness and outcome of PD in many other ways. For example, resource factor determines the number of teachers in schools. As revealed earlier, government primary schools in the research region operate with very limited number of teachers. Ijaz, a primary level teacher from the public sector, revealed that:

We are two teachers in the school responsible for teaching six classes. At a time, I have to engage three classes moving from one class to another. In 40 minutes' period, I spent around 10 minutes with each class. PD providers expect us to develop a lesson plan and to engage students in various activities. I wonder how that is possible in this situation.

As the excerpt suggests, the shortage of teachers creates a workload for the existing teachers restricting the possibility of implementing innovative ideas. In the limited time, teachers were unable to engage students in students in interactive activities which, according to them, require sufficient time. Similarly, schools also lacked material resources to facilitate implementation of new ideas. The teachers who had attended the course on ECE reported that they lacked the basic resources to be used at ECE level to implement what they had learned through PD. Jamila, an ECE teacher, reported that:

there were learning corners at the Mountain Institute [training venue]. Teachers were given ideas related to those corners and to use corners to engage students in various activities. However, such learning corners were not available in schools.

Likewise, teachers who, as a result of attending PD programmes, had realised the importance of using teaching aids reported that there were no teaching aids in their schools to use while teaching. Although teachers were usually given ideas to collect and use no-cost low-cost teaching aids, teachers reported that even if they collected such resources, they lacked space in their school to preserve them. Consequently, the lack of available resources was a noteworthy hindrance in implementation of PD ideas in the classroom (Buczynski & Hansen, 2010). These examples also support the data presented in Chapter Four that the existing PD programmes are idealistic and fail to take into account the lived experience of the teachers.

The lack of resources was also a challenge in arranging school-based learning activities for teachers. Due to the shortage of teachers in private schools and government primary schools, teachers reported that they were busy with their classes throughout the day and had no free teaching periods. Saif, a school leader from the private sector, stated that the issue with school

based activities was that teachers had heavy workloads. Any free periods were used either to check students' homework or to teach the classes where teachers were absent. The literature on PD of teachers shows a positive relationship between workload and the possibilities of learning as it influences professionals to reflect, ask for feedback and to collaborate with colleagues, consequently leading to greater opportunities for learning (Evers, Van der Heijden, & Kreijns, 2016). Schools in the research region, however, lacked structure and cultures to exploit those tensions as learning opportunities (Engestrom, 1999). Furthermore, because of the limited financial capacity of the private schools, teachers were paid less. As a result, it was difficult to motivate them to engage in extra activities. Wasif, a private school leader, explained that because schools were not giving attractive remuneration to teachers, there is no financial attraction for teachers to motivate them towards PD activities. Similarly, limited resources also restricted school leadership from engaging professionals to plan and execute school based PD activities for teachers. Kashif, a private school leader, informed that:

Ideally, a school should have a person responsible for supporting teachers professionally. However, our resource factors do not allow us to avail such services. We even cannot invite external professionals to facilitate some sessions with teachers inside schools as it involves cost.

In summary, this research has found that limited resources greatly influence the availability of PD opportunities for teachers as well as the implementation of new teaching and learning practices in the classroom context. Resource limitations restrict PD providers to organise longer duration programmes and to continue offering free of cost PD to teachers. PD providers are unable to extend follow-up support to teachers in order to address their emerging issues and to support implementation of learning. Similarly, it is challenging for teachers to trial innovative ideas when schools lack learning spaces and teaching aids, added to which shortage of teaching staff in government primary schools and workload pressures in some private schools restricts teachers' engagement in PD. Furthermore, when teachers are poorly paid they are more inclined to pursue other career opportunities and show little interest in PD activities. Consequently, any improvement in teaching practice in school in this region needs to consider far more than the quality of the PD programmes themselves. Adequate resourcing for PD programmes and for the schools themselves is a critical factor influencing the possibility, uptake and quality of PD programmes in this research region.

5.7 Conclusion

In relation to what makes PD effective, this section analysed contextual factors that influence the effectiveness of PD in the research context. These factors are of relevance to all key stakeholders including PD providers, the school system, school leadership and teachers as represented in Figure 5.4 below.

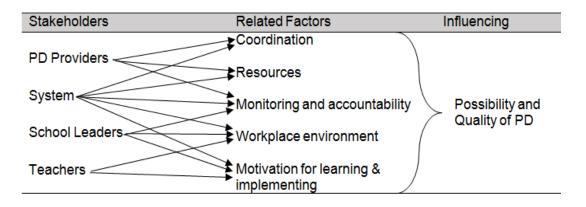


Figure 5.4 Factors influencing quality of PD and teachers' engagement in PD

As the figure shows, all stakeholders, in one way or the other, influence the possibility and quality of PD. PD providers influence PD through their approaches to coordination, monitoring and provision of resources. As the figure indicates, the system has influence on all five factors making it a significant stakeholder in current and potentially, future PD opportunities and outcomes. School leadership also has a critical role in the monitoring of teachers, provision of a conducive working environment and in enhancing teachers' motivation for learning and implementing their learning. Similarly, teachers' attitudes also influence their behaviour as well as the workplace environment. Collectively, these contextual forces influence the possibility and quality of PD. It suggests that PD is a complex process influenced by many contextual forces. This complexity of PD is one of the major themes discussed in the next chapter.

The next chapter synthesises and discusses the main findings of the research, which will lead to developing a theoretical model of effective PD for teachers in rural Pakistan.

6. DISCUSSION OF FINDINGS



Figure 6.1 Features and context determining effective PD

6.1 Introduction

This chapter presents a synthesis of the research findings structured into the framework shown in Figure 6.1 above. As represented in the figure, first the chapter evaluates the current situation of PD, 'where we are,' determined by the features and the context. In doing so, the chapter begins by outlining the features of effective PD as envisaged by the key stakeholders and then critically evaluates those features through relating them to the core features represented in other research on PD. Based on this analysis, the chapter makes two major claims. Firstly, recent trends in PD of teachers, as presented in the educational literature, are more reform oriented, whereas the perceptions and practices towards PD in the research region are more traditional. Secondly, context determines features of PD, and we still lack consensus on the core features of effective PD to be generalised across contexts. Next, the chapter critiques the existing PD opportunities in place for teachers in the research region and argues that these programmes are externally driven and less informed by the needs and realities of the teachers. The next section highlights those contextual factors, which influence not only approaches to PD but also the transference of learning from PD to the classroom context. Based on this analysis, it is argued that context has a significant impact on the effectiveness of PD. PD is a complex process influenced by different factors and actors. Effective PD is the outcome of both core features and contextual factors.

6.2 Features of Effective PD

This section first outlines the core features of effective PD envisioned by the stakeholders and then relates them to the list of core features proposed by Desimone (2009). Based on this

analysis, the section argues that core features of effective PD are influenced by perceptions, experiences and other contextual factors.

6.2.1 Core Features of Effective PD for Stakeholders

Table 6.1. Core features of effective PD for stakeholders

Relevance to the real needs of teachers
Focus on content and pedagogy
Active learning experiences
Sustained PD programmes
Regular follow-up support

Table 6.1 above outlines the core features of effective PD as envisioned by the key stakeholders in this research. As the list shows, effective PD for stakeholders is relevant to the real needs of teachers, focuses on both content and pedagogy, provides active learning experiences, is sustained over a period and affords regular follow-up support. The research participants provided sufficient evidence to justify each of these features. For instance, in the public sector primary schools, there is a model of multi-grade classes where two or three teachers are responsible for teaching five to six different year levels. Ironically, these teachers have been prepared to teach mono-grade classes. Effective PD for these stakeholders involved a programme that supported the teachers in successfully engaging students of multi-grade classes in meaningful learning activities. Similarly, stakeholders valued a PD programme having a focus on both content and pedagogy. The importance of content knowledge was particularly highlighted for some of the senior teachers who, owing to their limited content knowledge, were facing challenges in teaching the revised curriculum that had been updated by adding new concepts and terminologies. Pedagogical knowledge was favoured because teachers had either exposure to outdated and theoretical pre-service courses or they had not been through any preservice courses as in the case of teachers from the private sector. In addition, the participants emphasised the importance of active learning experiences as such activities enabled them to develop a deeper understanding of the concept and to gain practical ideas to assist implementation in their classroom. Likewise, programmes of a longer duration provided teachers with more active learning experiences and specific content knowledge, unlike short duration programmes which focus only on theory or general pedagogy. Lastly, follow-up was considered as a significant component of effective PD programmes as it enabled teachers to resolve their emerging issues and to successfully implement and sustain new practices.

6.2.2 Relating the Core Features with Recent Literature

The core features which emerged from this research hold many similarities to the core feature of effective PD presented in other research, in particular, the model presented by Desimone

(2009). Table 6.2 compares the core features of effective PD generated from this research alongside those developed by Desimone. Comparison of the two lists presents some surprising similarities given the significant variation in research contexts: rural and remote Pakistan and the USA. However, there are also differences, and these are considered in more detail in the following paragraphs.

Table 6.2 Comparison of features proposed by the stakeholders and Desimone

Stakeholders' core features	Desimone's core features
Active learning experiences	Active learning
Focus on content and pedagogy	Content focus
Relevance to real needs	Coherence
Programmes of longer duration	Duration
Regular follow-up support	Collective participation

Following an analysis of the similarities and differences in the list, four categories were developed as detailed in Table 6.3. The first category is of the feature, active learning which features in both lists/models and as such is included in the "*Aligned*" category. Many other studies have also reported that PD activities which provide active learning experiences are reported by participants to be more effective than the ones which are just theoretical in nature (Avalos, 2011; Bransford et al., 2005; Garet et al., 2001; Givvin & Santagata, 2011; Grossman et al., 2009; Ingvarson et al., 2003; Saunders, 2014; Soine & Lumpe, 2014; Timperley, 2008; Webster-Wright, 2009).

Table 6.3 Four categories of the core features of effective PD

Categories	Feature (s)
Aligned	Active learning
Somewhat aligned	Focus on content & pedagogy/content focus, relevance/coherence and duration
Not listed by Desimone	Follow-up
Not listed by research participants	Collective participation

The second category includes those features which are somewhat aligned in both models. However, as suggested, there are some differences between the features of content (Desimone) and content and pedagogy (this research). Content focus, for Desimone and many other academics (see, for example, Easton, 2008; Hawley & Valli, 2000; Ingvarson et al., 2005) relates to focusing specifically on the subject matter and the way teachers make subject matter understandable for students. Shulman (1986) divides these areas into 'content knowledge and

pedagogical content knowledge'. Although stakeholders stress the importance of content knowledge, they also value PD which focuses on pedagogy including classroom management, lesson planning, and group work, to name a few.

There are also similarities and differences between relevance and coherence. Coherence is conceptualised in literature as aligning PD with teachers' knowledge and beliefs as well as with what teachers are already doing or what reform initiatives are already in place in the region/district (Desimone, 2009; Garet et al., 2001). Stakeholders in this research, on the other hand, stress the relevance of PD to the everyday needs of teachers. Real needs for stakeholders are the gaps or the issues that they face in teaching. Teaching in multi-grade classrooms is one example.

The core feature of duration was identified in both models; however, in this research when stakeholders referred to duration, they were reporting on the length of external programmes they attended. In contrast, duration in Desimone's model refers to not only contact hours but also the way the PD programme spreads over the semester(s) (Desimone, 2011; Labone & Long, 2014). Teachers continued to teach in classrooms and attend PD after hours over an extended period as opposed to teachers in rural Pakistan often leaving their school and village for a week or more. This variation in the concept of 'duration' is important as it represents a difference in approaches to PD.

A clear difference in the two lists of core features was teachers in rural Pakistan reported that a PD programme without follow-up has limited impact upon their practices. Although, follow-up has been listed as a significant component of effective PD by many academics (see, for example, Fullan, 1993; Guskey, 2002; Hawley & Valli, 2000; Huberman & Miles, 2013; Ingvarson et al., 2003; Knight, 2009), surprisingly this feature has been paid little attention in recent research on the core features of effective PD (see, for example, Desimone, 2009, 2011; Garet et al., 2001; Givvin & Santagata, 2011; Soine & Lumpe, 2014). Why this might happen is discussed in the next section.

Collective participation has been identified as another core feature of effective PD given it promotes more interaction and discourse opportunities for groups of teachers from the same school or department (Desimone, 2009, 2011; Labone & Long, 2014). Interestingly participants in this research, however, did not identify collective participation as a feature of effective PD. The possible reasons behind this variation are discussed in the following section.

6.2.3 Features of PD Influenced by Experiences

One of the major claims based on a deeper and more critical review of Table 6.3 is that individuals suggest features of effective PD based on their perceptions of what PD is and how

and where it takes place. Conventional approaches to PD, traditionally, are transmissive aiming to preparing teachers to implement selected reforms and usually taking place outside school or classroom (see, for example, Garet et al., 2001; A. Kennedy, 2014; Kooy & van Veen, 2012). A review of literature from the past two decades, however, reveals that there has been a gradual shift in the models of PD to those that are transformative (A. Kennedy, 2014a), also referred to as reform oriented (Garet et al., 2001) or innovative models (Kooy & van Veen, 2012). These models are usually grounded in the workplace, aiming at ongoing inquiry, collective learning, professional learning communities, collaboration, peer coaching and so on (Darling-Hammond & McLaughlin, 2011; Fullan, 2002; Givvin & Santagata, 2011; Labone & Long, 2014; Lave & Wenger, 1991; Saunders, 2014). Since recent trends of PD in developed countries are reform oriented, academics mainly list such features that are associated with reform models. For example, when teachers' learning activities are grounded in the workplace, it requires collaboration, collective inquiry, sharing and so on. Following this logic, 'collective participation' will be a feature of reform models of PD. However, once PD is grounded in the work context, follow-up may not be explicitly obvious, as follow-up support is generally perceived when provided by additional contact with external PD sources. This may account for the reason that reform oriented academics have not identified follow-up as a core feature of PD.

In contrast, stakeholders in this research have a more traditional orientation to PD. While latest trends of PD in developed countries have shifted from traditional to reform models, teachers in the research region still only access external PD opportunities. They associate PD only with external workshops. This claim is supported by the questionnaire data reported in Chapter Four. Accordingly, PD for the majority of the research participants is constructed as the acquiring of knowledge and skills through attending external workshops. Stakeholders did not refer to reform models of PD such as collective participation, collaborative inquiry, mentoring or any other workplace learning models. There was very little evidence of reform models being in practice in the schools of the research region. Since stakeholders have largely experienced external training models, and these models have failed to include follow-up on return to their schools, it is not surprising that this emerged as a core feature of effective PD for teachers in the research region. They viewed follow-up as critical as it enabled them to implement externally acquired ideas and skills more effectively in their classroom context. Owing to their lack of exposure to reform models, it is also understandable that collective participation did not emerge as a core feature of effective PD for the stakeholders in this research.

6.2.4 Context Determines Features

The second claim generated from the analysis of the core features is that the features of PD are determined and influenced by the conditions of teachers and realities of the context. For example, the literature emphasises content focus and gives little attention to pedagogy (see, for

example, Easton, 2008; Hawley & Valli, 2000; Ingvarson et al., 2005). Although stakeholders in this region highlighted the importance of content, they also placed value on pedagogy. A possible explanation of the inconsistent views may be that teachers in developed countries enter the teaching profession with sound pedagogical knowledge through attending quality pre-service teacher education. Those teachers may not require general pedagogy although constantly emerging new knowledge may necessitate updating their content knowledge. Consequently, a list of core features of effective PD coming from those contexts may not include a focus on pedagogy as a valued feature of PD. The case in developing countries particularly in Pakistan is otherwise. Similar to other low-income countries (Lewin & Stuart, 2003), teachers in this region either have access to outdated and theoretical pre-service teacher education or may not have any pre-service teacher education as in the case of teachers in the private schools. Subsequently, effective PD for them is the one which includes addressing issues of pedagogy. This interpretation is supported by Avalos (2011) who argues that teachers in different contexts have different starting points and a teacher from a developing country should not be assumed to have the same PD requirements as a teacher from a developed country. Likewise, teachers in developed countries may not require follow-up because either they are engaged in reform models or their school culture facilitates the implementation of learning. On the contrary, as revealed in this research and supported by the earlier studies, teachers in developing context such as Pakistan urgently need follow-up support since they struggle in an educational context where there is no support for them (Mohammed & Harlech-Jones, 2008).

Hence, the comparison of stakeholders' list of effective PD with Desimone's model which has a reform oriented context supports the argument that the application of features of PD must adjust to different circumstances (Opfer & Pedder, 2011a). However, the scholarly descriptions of effective PD often fail to account for the different realities experienced by teachers in quite diverse educational contexts and circumstances. Our present understanding of effective PD is habitually limited to research from developed countries and mistakenly generalised across contexts. If PD providers and change agents (especially international NGOs) design PD for teachers in unfamiliar contexts drawing on their own assumptions and understanding, it is unlikely that such programmes would produce the outcomes they intend. For example, when change agents intervene in the research region with a programme designed based on the consensus list of effective PD, they will be missing significant features of effective PD valued by the participants in the research region. This situation calls for carefully examining the context while transferring and implementing West-inspired models and theories. The prescription is not to deny the knowledge and ideas coming from the developed context; however, the externally driven models and ideas should be filtered and aligned to the realities of the local context. As Örtenblad, Babur, and Kumari (2012) have concluded in their editorial to the Special Issue on Learning in Asia:

[T]he articles [contributed to the special issue on learning in Asia] do not argue against learning from alternate perspectives, however, they do suggest that caution is needed to ensure that the applicability and relevance has been thoroughly studied and examined, instead of blindly following without interpreting the value-based and practical implications of cross-cultural transfers and borrowing. (p. 134)

6.3 Existing PD programmes Vis-à-vis Features

While the stakeholders in this research suggest core features of effective PD based on their experience and some of these features are well supported by the research literature, as detailed in the Chapter Four, the majority of the existing PD programmes in rural Pakistan lacked these features. The following section sets out to critique existing PD programmes in place for teachers in the research region vis-à-vis the core features generated from this research.

6.3.1 Examples of Effective PD

Data suggested that a few PD programmes offered for teachers contained the features proposed by the stakeholders. Multi-grade courses and Primary Education courses were the two PD programmes which, according to the participants, contained the features of effective PD. The Multi-grade teaching course was designed for primary level teachers on teaching in multi-grade classrooms and as a result was highly relevant to the real needs of those teachers. Similarly, the multi-grade course had a follow-up component where the course facilitators visited the trainee teachers and extended required support during the process of implementation. These examples included the core feature of relevance, pedagogy and follow up hence it is not surprising teachers identified these as effective PD.

The other PD programme valued by the stakeholders was the Primary Education Course. This programme also contained several features of effective PD namely its extended duration, active learning and relevance to the real needs of teachers. The duration of the Primary Education Course extended over six weeks. This duration was long enough to engage teachers in active learning experiences. The facilitator demonstrated the concepts, and the teachers were also provided with opportunities to trial the concept in the venue. Moreover, group work, discussions, debates and presentations were included, which allowed the teachers to reflect on the new practices and to develop an in-depth understanding of the concepts within the practice. Likewise, due to the longer duration, both pedagogical and content issues of the teachers were addressed. Therefore, the three core features of effective PD, namely, the extended duration, active learning experiences and relevance to the real needs of teachers were the basis of the Primary Education Course being viewed by stakeholders as effective. Consequently, participants attending Multi-grade and Primary Education courses consistently referred to these two PD programmes whenever effective PD was under discussion.

Although there was evidence to show the effectiveness of ECE programme, the programme contained only one feature of effective PD, namely, relevance to the immediate needs of teachers. The participants revealed, however, that there was limited demonstration of the presence of the other core features of PD such as active learning, extended duration and follow-up support. It suggests that, to be effective, PD should contain more than one of the identified core features.

6.3.2 Issues with the Majority of Existing PD

The majority of PD programmes offered for teachers in the research region lacked most of the features envisaged by the stakeholders, and reported in research literature, as effective PD (Birman et al., 2000; Desimone, 2011). The general trend involved the provision of short-term courses ranging from three hours to five days usually through a lecture method. Teachers experienced a tramission model focuses on imported theories, and many found these had little relevance to their teaching context and immediate needs. Although research consistently emphasises the importance of aligning PD programmes with the specific needs of teachers (Ball, 1995; Cheng, 2015; Phillips, 2008; Sparks & Loucks-Horsley, 1989; Zepeda, Parylo, & Bengtson, 2013), the existing programmes neglected to attend to this tenet.

Another major concern raised by the stakeholders was that most of the PD programmes focused on general pedagogy which failed to address their content and pedagogical content needs. While the importance of developing pedagogical knowledge was critical in the region given that the private school teachers lacked pre-service education, general pedagogy, however, is not the only need of teachers. The content and pedagogical content (Shulman, 1986) related needs of the teachers were found to be more critical due to the contemporary revisions in curricula and the minimal content knowledge of some of the senior teachers. Based on these conditions, teachers in these contexts need to learn both the content that students are expected to learn as well as the instructional strategies that address student learning the content. Solely focusing on one at the expense of the other fails to address the full scope of teachers, and ultimately student learning needs.

The most significant issue with the existing PD programmes is their short duration. Either a three hour or even a five-day course is insufficient to address teachers' actual requirements and to enhance their capabilities in regard to content, pedagogical content and general pedagogy. Evidence from the other parts of Pakistan (Bashiruddin & Qayyum, 2014), for example, suggests that 80% English teachers lack professional qualifications to teach English. The situation is even worse in rural Pakistan owing to its remoteness and the lack of teachers trained in that discipline (Nawab, 2012). The evidence from this research also showed that teachers in this region need support not only in disciplinary content but also in specific pedagogies for teaching specific subjects as well as in general instructional pedagogies (lesson planning, classroom

management, group work). Given these scenarios, PD courses of limited duration are nothing more than, what Ball (1995) calls, 'style shows'. Given the amount of time allocated to these programmes, it is unsurprising that the orientations of these 'style shows' are limited to a theoretical focus and a transmission process where teaching theories are only discussed but not applied.

The explicit agenda of change agents who intervene for capacity building of teachers is enhancing teaching learning practices through shifting from teacher-centred pedagogies to child-centred ones. The goal of child-centred teaching approaches, however, may not be achieved through teacher-centred or transmissive models of PD. If teachers have to introduce child-centred pedagogies in their classrooms, they have first to experience such approaches through modelling during their PD (Hawley & Valli, 2000). Active learning in the classroom may not be facilitated without active learning in the training venue. It is contradictory and counterproductive to utilise traditional transmission models of PD to instruct teachers to use active learner-centred teaching techniques with their students (Gulamhussein, 2013). The majority of the existing PD activities, similar to what M. Kennedy (2016, p. 947) has observed about typical traditional PD, "meet with teachers *outside* of their classrooms to talk about teaching, yet they expect their words to alter teachers' behaviors inside the classroom". And the consequences of such approach are reasonably predictable.

6.3.3 Features of PD are Interdependent

The features of effective PD, as discussed above, are interdependent, one feature supporting or facilitating the other (Garet et al., 2001; Porter et al., 2000). As shown in Figure 6.2, like connected cogs, they convey motion to one another.



Figure 6.2 Features of effective PD influencing one another

Duration is the greatest driving force on which most of the other features depend (Garet et al., 2001). Longer duration allows involving teachers in active learning activities as well as addressing both content and pedagogical related issues. If the duration of the existing programmes is limited, facilitators are unable to afford active learning activities or to address content related issues. PD of shorter duration allows only transmitting a limited range of

concepts through a lecture approach to the passive listeners. This fails to meet the characteristics of effective learning and as such, teachers' time in attending these sessions is far from fruitful.

6.3.4 Lack of Follow-up Support

Added to the lack of the design features as discussed above, another concern of the stakeholders was that once a PD programme ended, the chapter for the trainers was closed, and there was no further connection between teachers and PD providers. Consequently, teachers lacked support to address the contextual challenges they confront once they attempt to incorporate the new theories into their teaching practices on their return to schools. PD providers have to consider whether teachers are able to do what the PD programme expects them to do (Penuel et al., 2007). It is unrealistic to expect them to implement new theories without any guidance and support (Mohammed, 2004). When the concept of cooperative learning is shared with teachers, issues emerge regarding the implementation of this idea in the classroom context. The situation is aggravated given that schools lack supportive cultures. Follow-up support, at this stage, enables teachers to implement their learning, address the emerging issues and sustain the practice (Guskey, 2003; Ingvarson et al., 2003; Knight, 2009). Since teachers in the research region lack this significant support, the consequences of limited uptake of PD into practice are predictable. Teachers soon return to familiar ways of working.

Ideally, coupled with extending follow-up support to teachers, PD providers should also systematically evaluate the impact of their programmes (Guskey, 2000). Evaluation of the PD programmes will allow them to understand the contextual challenges and the extent to which their programmes address the immediate needs of teachers. When PD providers close the chapter after the completion of a PD programme, it appears to be very unlikely to contribute to the improved practices of teachers without understanding what works for them. Evaluation of the PD programmes will also allow them to listen to the teachers who are the real implementers of their change initiatives. Listening to the teachers will be helpful not only to enhance their motivation but also to make the PD programmes more aligned to their real needs (Day, 1999; Flores, 2005).

To conclude this section, the majority of the existing PD programmes in the research region lacked the features as envisioned by the stakeholders and proposed in the PD research literature. Studies have found that external workshops do contribute to the improved practices of teachers provided they involve active learning experiences that model engaged pedagogical approaches, attend to the immediate needs of teachers and are subsequently supported during implementation (Cordingley, Bell, Isham, Evans, & Firth, 2007; Guskey & Yoon, 2009; Lauer, Christopher, Firpo-Triplett, & Buchting, 2013). As Guskey and Yoon (2009, p. 496) argue, "workshops are not the poster child of ineffective practice". They could be effective or ineffective

based on the features they contain. A major problem with the existing PD programmes in the research region is they take little account of the features proposed by the stakeholders and supported by the educational literature.

6.4 Contextual Factors Influencing PD

It has been argued that PD is not limited to what happens in a training venue (Saunders, 2014). There are a host of other contextual factors that influence the effectiveness of PD. Although PD has been theorised based on its features such as content, structure and process, some studies (for example, Lieberman & McLaughlin, 2000; Rinke & Valli, 2010) have highlighted the third factor – context. As represented in Figure 6.3 below, this research identified several critical contextual factors, which influenced not only the possibility and quality of both external and internal PD but also the transference of learning from the training venue into the classroom context. These factors included a dependency on external sources, valuing and rewarding PD in the system and the role of school leadership.

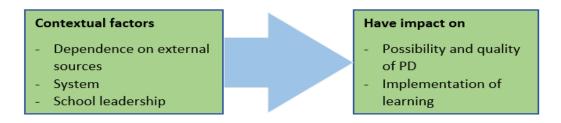


Figure 6.3 Contextual factors impacting PD of teachers

6.4.1 Dependency on the External Sources

External workshops which teachers in most developing countries including the current research region attend have been criticised on several grounds, namely, lack of relevance, having limited applicability in the actual classroom setting, being episodic and brief and using transmission processes (Cole, 2005a; Dadds, 2014; Easton, 2008; M. Kennedy, 1998; Timperley, 2008). Building on a situative perspective and social theories of learning (S. Brown & Duguid, 1991; Lave & Wenger, 1991), considerable attention has been paid to grounding teacher development activities in the workplace with the assumption that this approach enables teachers to be engaged in ongoing and collaborative learning and to find collective solutions for their context specific issues (Fullan, 2007; Hammerness, Darling-Hammond, & Bransford, 2005; Newmann et al., 2000; Postholm, 2012; Watson & Michael, 2015). Literature even suggests the word 'professional development' should be replaced with 'professional learning' given that PD conventionally refers to a one-time development whereas teachers require continual learning and should be encouraged to take some control of this as well (Easton, 2008; Fullan, 2007).

This research, however, identified that stakeholders in the research region are still highly dependent on external models for their PD owing to several factors. Firstly, stakeholders in the research region are not informed by the recent trends in PD and their expectations are limited to external workshops. When teachers assume that their developmental needs are met by external learning activities only, other learning possibilities at the workplace are constrained (Cole, 2005). Teachers require both a realisation regarding the possibility of learning in their work context as well as the skills and attitude to exploit workplace learning models. Ideally, PD providers should develop such realisation and skills as they are the change agents who aim at improving the situation. However, instead of intervening using reform models or developing the capacity of teachers for ongoing learning, PD providers use only external transmissive model which reinforces the perceptions of teachers that development is related to only external activities (Cole, 2005).

Secondly, school-based or reform models of PD arguably happen in an environment where teachers are well qualified and possess required capacity to generate discussion and to resolve their emerging issues (Opfer & Pedder, 2011a). Teachers in the research region similar to other economically depressed areas have reduced capacity which makes them dependent on training and external workshops (A. Hargreaves, 2002). Moreover, for reform models, teachers should have autonomy to decide on what to learn and how to learn. Teachers in this region, similar to what Avalos (2011) and A. Hargreaves (2002) observe about teachers in the similar contexts, are still expected to implement the theories and models which are dictated to them by others.

Consequently, innovations and improvements in the practices of teachers in the research region are directly related to the external opportunities that he or she has availed. Teachers who lack access to external PD opportunities have little possibility of being engaged in formal learning activities in the work context. Teachers may be learning through informal ways that are unplanned or unconscious; however, predetermined, structured or intended forms of learning in the work context could not be found in practice. Therefore, if effective PD is associated with learning in the context through using a variety of workplace learning models, teachers in the research region lack exposure to effective PD. It is because of the many contextual factors as discussed above which make teachers mainly depend on external opportunities only.

6.4.2 System Related Factors

This research found that the most powerful factor influencing PD was the system where teachers work which influences the motivation of teachers towards PD and the learning opportunities they exploit. A critical analysis of the systemic factors suggested that working in the existing system, teachers are very unlikely to be involved in, or benefit from PD activities.

A significant limiting factor is that PD of teachers is given very little importance in the system. Both the public and private sectors expect certain qualifications while recruiting teachers. Once teachers enter the profession fulfilling those qualifications, it satisfies the system that the basic requirement has been met, and subsequently, these teachers are not expected to be involved in continuing-PD activities. It has been argued that one of the most significant factors driving teachers towards improving their practices is the need for improvement and innovation (Piirto, cited in Nemeržitski et al., 2013). Since the system is satisfied with the existing practices of teachers, they do not feel the need of any improvement and innovation. This scenario appear to be similar to how A. Hargreaves (2000) sketches the pre-professional image of teaching:

If one holds to a simple, pre-professional image of teaching, teachers need little training or ongoing professional learning, preparation time is relatively expendable (since the demands of preparation are not so great), and budget cuts that reduce contact with colleagues outside the classroom are seen as having little impact on the quality of what goes on within it (because it is assumed that teachers control everything within their individual classroom domain and keep all their work confined to it). (p. 157)

Some teachers may exercise their own initiative to attend PD; however, their participation in these activities is largely unappreciated or rewarded. Similarly, teachers may attend PD but continue with their conventional practices because the system does not encourage or expect teachers to be accountable for implementing their learning. Attending PD or otherwise and implementing their learning or otherwise do not make a difference in the career of teachers. In the public sector, promotions are awarded based on seniority irrespective of teachers' capacity. Although there is an appraisal mechanism in place in the system, PD is given no weight in this appraisal. Similarly, the data are kept confidential, and the appraised teachers do not receive feedback on their strengths or areas for improvement. Since innovative behaviours are found to be largely present when they are supported in an environment of accountability, recognition and reward (Cropley & Urban, 2000; Nemeržitski et al., 2013; Trehan & Paul, 2014; Wells, 2014), it is unsurprising if, in the existing system, teachers lack personal dispositions toward improving their practices or to be actively engaged in PD activities.

Although data suggested relatively improved accountability system in the private sector schools, there were other factors leading to the reduced interest of teachers towards PD. Compared with public school teachers, those in the private schools are paid less and have no job security. In the absence of such reasonable job security conditions, the private school teachers constantly look for other opportunities and consider teaching as a temporary career resort. In this scenario, it is very unlikely to expect them to be engaged in PD.

While the current system in the research context certainly lacks incentives for engaging in PD, the aspect of teachers' own agency still needs consideration. Fullan (1993) identified that teaching also has a moral purpose – a commitment to making a difference and as such

individual teachers should seek to be the most effective teacher they can be. Although, there are some teachers who are committed to PD and who exploit potential opportunities, most teachers in the research region have adapted to the low expectations that are inherent within the system. This suggests that the setting in which teachers work has a powerful influence on the beliefs and practices of teachers (A. Hargreaves & Fullan, 2012). Data showed that the longer teachers stay in the system the less motivated they are towards PD. Senior teachers, consequently, were reported to be most resistant to learning and believed that they have the required expertise gained through long experiences. They lack a realisation that, although required to develop expertise, experience alone is not sufficient (Dimmock, 2014) or as Day (1999) highlighted, learning from experience alone limits development. It is apparent in the research context that the attitude of teachers has been influenced and reinforced by the system related factors. Given PD is not valued and rewarded at a system level, it is unsurprising that the teachers in the region lacked motivation for engaging in PD. It suggests that contextual factors have a remarkable influence on teachers' engagement in PD. Providing teachers with external PD or expecting them to be engaged in an ongoing learning will not be helpful unless the system level factors are favourable. Consequently, as the report of USAID (2011) on the lesson learnt in education suggests:

Developing the capacity of educators, however, involves more than just the provision of learning opportunities. These capacity building programs must be linked and integrated by structures, mechanisms, and policies that regulate the frequency and standard of professional development programs as well as provide the incentives to join, remain and grow in the profession. (p. 4)

6.4.3 School Leadership

In educational literature coming from the West or developed countries, school leaders are portrayed as potential champions with a significant role in PD of teachers. A summary of the many roles played by school leadership in supporting teachers' PD is presented in Table 6.4.

Table 6.4 Western literature on the role of school leadership in PD of teachers

Role of school leadership in supporting teachers' learning	Authors
Being committed to change and improvement	(Labone & Long, 2014)
Identifying vision, conveying expectations and extending required support	(K. Leithwood et al., 1998)
Creating professional learning culture	(Cole, 2005a; Day, 1999; K. Leithwood & Riehl, 2003)
Creating setting where teachers feel safe to admit mistakes	(Darling-Hammond & McLaughlin, 2011; James & McCormick, 2009)
Creating supportive conditions that will enable teachers to implement their learning	(Hollingsworth, 1999; Robinson, 2007)

Research, as detailed in the table, demonstrates that school leaders model learning through being committed to change, conveying high expectation to others, creating learning cultures, extending required support and encouraging teachers to be innovative. The analysis of data on the role of school leadership as presented in Chapter Five (page 112) revealed a significant gap between leadership models portrayed in literature and exercised in the research region. The transformational (Bass, 1990) or instructional (Hallinger & Leithwood, 1998) roles of a school leader are too ideal and mythical in this region. This research supported earlier findings from Pakistan revealing that school leaders perform more administrative role rather than academic role (Simkins et al., 1998).

Data indicated certain influential factors restricting the role of school leaders in the PD of teachers. Firstly, when the system lacks value or reward for PD, school leaders also give less importance to it. School leaders may be interested in PD if such activities make a difference in the incentives and career of teachers. Similarly, the system has no expectations from school leaders to play any role in the PD of teachers. It was interesting to note that the job descriptions of school leaders were not available at the education office. As communicated verbally, supporting teachers in their PD or organising school based PD activities were not part of their job description. Similarly, school leaders lacked awareness that supporting teachers in their PD is one of their major roles.

School leaders in the research region were also reported to be lacking capacity to support teachers' PD. Participants were of the view that leaders require expertise to contribute to the PD of teachers. However, the system lacks a mechanism to recruit or promote competent individuals to the position of leadership. In the public sector, seniority is the only criteria for promotion. The private schools are mainly owned and run by individuals who lack the required expertise to understand the importance of supporting teachers' professional capabilities. Earlier research also supports this finding revealing that both the public and private sector schools in Pakistan are managed by untrained leaders (Simkins et al., 2003). The systems lack any policies or strategic initiatives to develop the capacity of school leaders. Like the teachers, PD opportunities for school leaders are very rare, although, the need of developing the capacity of school leaders in Pakistan has consistently been stressed (M. Memon, Ali, Simkins, & Garret, 2000; Rizvi, 2008). Research findings from Pakistan suggest that wherever such capacity building programmes have been conducted for school leaders, a positive impact of those programmes on their practices has been reported (Retallick & Mithani, 2003; Rizvi, 2008). As presented in Chapter Four (page 82), this research also found that the leadership programme, which some of the research participants attended helped them resolve many of their school related issues. However, a few school leaders benefited from that programme which was discontinued owing to the resource constraints. The majority of school leaders in the research

region lack access to capacity building programmes. Consequently, the role of school leadership, owing to their lack of capacity, has been a restricting factor in facilitating teachers with PD opportunities in general and school-based teacher development activities in particular.

6.5 Influence of the Contextual Factors on PD of Teachers

Collectively, all the above contextual factors influence the effectiveness of PD in a variety of ways. Firstly, these factors determine the possibility of professional learning activities for teachers. Since PD is associated with external workshops and school leaders have little or no role in facilitating school based PD activities, teachers have very limited learning opportunities. Secondly, the involvement of teachers in PD and their implementation of learning are found to be closely connected to their attitude (Fields, 1990; Lamb, 1995; Ramatlapana, 2009; Yuen-Kwan, 1998). Attitude is influenced by experience and reinforced by the values in the systems in which individuals work (Netolicky, 2016). In the current research context, teachers experience a system which fails to motivate them to engage in PD. For example, PD is not valued or rewarded. Similarly, the system also regulates the role of school leadership who in turn influences school culture and structure which impact the attitude and behaviour of teachers. Consequently, the current school system and structures are built in such a way that will only maintain the status quo instead of promoting transformation and innovative educational practices by engaging teachers in continuous learning (Fullan, 1993). Since the system influences both leadership and teachers, as shown in Figure 6.4, the impact of the system on the PD of teachers is significant.

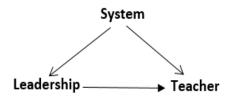


Figure 6.4 Contextual factors influencing one another

The contextual factors discussed above not only influence the attitude of teachers toward PD but also determine the transference of learning from PD to classroom. When the system related factors are less facilitative, even the teachers who engage in external PD fail to bring any sustained improvement in their practice. Teachers are less interested in implementing their learning as the system does not encourage or reward any innovation. The implementation of learning also depends on the supportive and facilitative nature of the whole school environment (Sahlberg, 2009). Even if teachers attempt to introduce new practices, lack of support from the system, leadership and the attitude of other colleagues gradually encourage a return to traditional practices. It is difficult for motivated teachers to influence their peers as the collective beliefs and practices prevailing in a school are often too strong to be impacted by an individual

teacher (Cole, 2005a; A. Hargreaves & Fullan, 2012; Opfer & Pedder, 2011b). Consequently, the majority of PD programmes had very little impact on the practices of teachers. Although there was some evidence to demonstrate a difference between teachers who attended PD and those who did not, most of the participants especially school leaders were very doubtful about the impact of existing PD programmes in this research. Since student achievements depend upon the quality and practices of teachers (Soine & Lumpe, 2014), if the practices of teachers remain unchanged, it is safe to assume that the achievement of students will also remain unchanged.

6.6 PD: A Complex Process

Based on the analysis of the contextual factors, it is concluded that PD may not be labelled as effective or otherwise based solely on their design and process features. There are certain players and factors that interplay and collectively shape the effectiveness of PD. These layers and actors include firstly the features of PD mainly determined by PD providers and secondly, context represented by the system, school leadership and teachers. The way these actors and layers influence PD is visually represented in Figure 6.5 below.

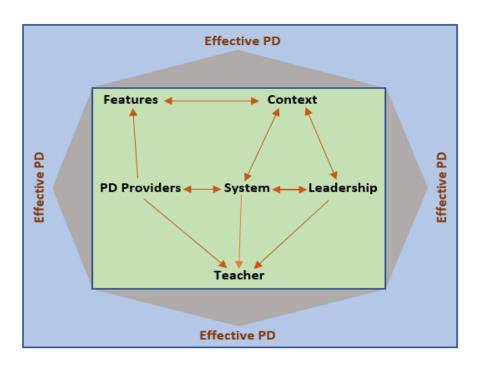


Figure 6.5 Layers and actors impacting effective PD

As indicated in the figure, effective PD is determined by the interplay of features and context. Although features of PD are mainly determined by the PD providers, context also influences features of PD. For example, follow-up support and pedagogy are the context specific needs of teachers which bring implications for the features of PD in the research region. Similarly, context is shaped by features of PD, system and school leadership. For example, teachers may be engaged in ongoing learning if PD providers develop such awareness and skills among them.

Teachers may also be motivated towards PD if the system values and rewards their involvement in such activities. Similarly, how teachers engage in PD and implement their learning also depends on what supportive conditions school leadership has developed.

The role of school leadership, on the other hand, is influenced and determined by the system. If the leadership lacks a positive role in PD of teachers, it is because the system does not expect such a role from them. Similarly, school leadership influences both the context and the system. For example, the leadership may stimulate teachers to be involved in PD and would also influence the system to initiate relevant PD for teachers, although it is not happening in the existing situation. In addition, PD providers and the system also influence each other. The linkages and coordination between these two players certainly influence the effectiveness of PD in many ways. How PD is planned and implemented, which teachers will participate in PD, what teachers are expected to implement and who will provide support to teachers during implementation are determined by the coordination between these two players.

Although teachers are the main players in the arena, as shown in the figure, their attitude and behaviour are shaped by PD providers, system and school leaders. For example, teachers are unable to introduce innovative practices as a result of attending PD mainly because PD providers have failed to provide them with practical ideas to implement in the classroom or to extend follow-up support to them. Similarly, the system and school leaders influence the implementation by facilitating, encouraging and rewarding the teachers. Teachers' attitude, on the other hand, determines how interested they are in PD, what opportunities they would exploit and how they implement their learning. In this way, teachers may not influence other players; however, they do influence the effectiveness of PD. This analysis suggests that PD is a complex process influenced by many layers and players. Providing teachers with effective PD may not be possible without realising and considering these complexities.

6.7 Conclusion

Building on the findings presented in chapters four to six and supported by the literature, this chapter synthesised findings and presented a range of arguments with regard to effective PD. Firstly, features of effective PD are determined by the perceptions and experiences of individuals in particular contexts. When stakeholders consider general pedagogy and follow-up as core features of effective PD, it is because of their experiences and their contextual needs. Secondly, PD programmes offered for teachers in the research region are externally driven and less informed by the views, experiences and realities of teachers. These programmes, consequently, have been less successful in meeting the needs of individual teachers and to equip them with practical ideas that can be applied in real situations. Lack of follow-up support further hinders the possibility of transferring PD learning to the classroom context.

The chapter also argued that effective PD is not related to only the design and process features, rather there are many contextual factors that influence the possibility, quality and impact of PD. PD is less valued and rewarded in the system which results in reduced motivation of teachers toward PD. Similarly, teachers' involvement in PD often depends on school cultures. Schools in the research region lack a learning cultures mainly because of the limited role of school leaders who are also, influenced by other systemic factors.

Thus, PD is a complex process where many layers and actors interact, influencing one another and ultimately determining the quality and possibility of PD opportunities for teachers. Providing teachers with PD incorporating effective key features may not produce desired results unless other contextual factors are considered. Similarly, only addressing contextual factors may not be helpful unless PD programmes contain the proposed features. To afford teachers with effective PD, all factors and actors need to review their existing practices and consider how to move towards more effective models of PD. The next chapter details how that shift might occur.

7. MOVING FORWARD

We cannot make major headway in raising student performance and closing the achievement gap until we make progress in closing the teaching gap. That means supporting children equitably outside as well as inside the classroom, creating a profession that is rewarding and well-supported, and designing schools that offer the conditions for both the student and the teacher learning.... (Darling-Hammond, 2015, p. 18)

7.1 Introduction

This research has identified that two major stakeholders, namely the PD providers and the system (education department), play a significant role in collectively determining the effectiveness of PD for teachers in the research region. Participants in this research valued certain features of PD based on their experience; however, the majority of the existing programmes lacked those features. PD providers have their own assumptions and models less informed by the realities of the teachers. In addition, the influence of the system on teachers' work is even greater. The system regulates monitoring and accountability, the value attached to PD, the role of school leadership and the attitude and behaviours of teachers towards learning and implementation of learning. Building on this existing situation, this chapter suggests a potential model to provide teachers with more effective PD opportunities. A visual representation of the suggested change model is provided in Figure 7.1.

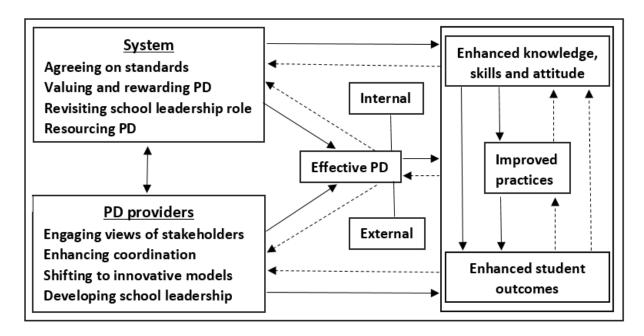


Figure 7.1 Suggested model of change for effective PD

As shown in the top left box of the figure, the model, first, considers the change initiatives required at the system level with the assumption that unless the system changes the prevailing practices and approaches towards PD of teachers, it is unlikely that any improvement in

teachers' engagement in PD will be achieved. The suggested changes at system level include agreeing on standards and outcomes, valuing and rewarding PD, establishing a commonly held role for school leadership and resourcing PD for teachers. As shown in the figure, the model, then, presents context appropriate strategies for PD providers. These strategies include engaging the views of stakeholders, shifting to innovative models of PD, enhancing coordination and working on capacity building of school leaders. The arrow connecting educational systems and PD providers recognises that these two factors influence and contribute to the initiatives of one another. If both parties perform their respective roles, as represented in the figure through arrows, it will contribute to effective PD which will lead to enhanced knowledge, skills, attitude and practices of teachers. Consequently, the ultimate aim of PD, namely, enhanced student outcomes, which has been unrecognised under the current models and conditions, will be achieved. The reverse pointed arrows with dotted lines are to indicate the potential at each level of the change model for the impact at one level to produce a counter impact on the preceding level. For example, enhanced student outcomes may lead to the possibility of further improving the practices, knowledge, skills and attitude of teachers, which may also lead to enhanced effectiveness of PD as well as to the improved practices of system and PD providers. As the figure indicates, the recommended model for change in PD in the region acknowledges that effective PD in the research region should be a blend of both external and internal activities.

The suggestions and strategies as listed in the model are described and rationalised in the following sections. First, the system related initiatives are presented. The chapter, then, proceeds to addressing initiatives to be considered by the PD providers.

7.2 Initiatives Required at the System Level

Although the design and process features are highly significant in contributing to the effectiveness of PD, this research identified that unless the system where teachers work recognises and facilitates PD, teachers are unlikely to avail and benefit from the external PD activities or engage in internal PD or implement their learning in the classroom. It is argued, therefore, that consideration of system related factors should be a priority if teachers are to be afforded with effective PD opportunities. Based on the analysis of the system related factors in the preceding chapter and as represented in the figure above, the following change initiatives at the system level are suggested.

7.2.1 Agreed Standards for Teachers and Outcomes for PD

Teachers' engagement in PD is more likely to improve if all the key stakeholders agree on the standards for teacher performance and outcomes for PD. One of the interesting insights from this research is the perceived identity or profile of a teacher. A perception has developed historically in this region that anyone can be a teacher irrespective of his/her capacity and

preparation. This perception is to be contrasted with the expert perspectives regarding the knowledge required for effective teachings, such as 'content knowledge, pedagogical content knowledge and curricular knowledge' (Shulman, 1986).

The foremost and significant step towards effective PD, therefore, would be to use standards for teacher performance and to ensure that these standards are shared and agreed on by the key stakeholders such as teachers, school leaders, education department and PD providers. A potential strategy in this regard would be to utilise the already developed National Professional Standards for Teachers (Ministry of Education, 2009b, see Appendix I). Although these standards have been developed for pre-service teachers attending initial teacher education, they are also applicable to the teachers who are already in the profession. While efforts to develop the existing teachers' performance to those standards or expecting existing teachers to demonstrate those standards will entail considerable challenges, introducing these standards with all the key stakeholders will serve several purposes. Firstly, it will establish the perception that teaching is a profession that requires certain practice standards. Secondly, these standards will assist teachers to reflect on their identity and to evaluate whether they possess the desired knowledge, skills and attitude required for effective teaching. Evidence suggests that in other contexts where such standards are deployed, teachers use them as a framework for professional learning (Mayer, Mitchell, Macdonald, & Bell, 2005). Although standards represent a technical approach to teaching, given the conditions of the research context, a focus on standards-referenced PD would prioritise relevance as a core feature of any PD offerings.

Another significant step towards effective PD would be developing a shared understanding among all the stakeholders that the ultimate goal of PD is enhancing the academic achievement of students. As discussed in Chapter Four, the foremost outcome of PD for the majority of the participants was enhancing their own knowledge and skills. Although, learning new knowledge and skills is one of the outcomes of PD, stakeholders disregard other significant outcomes reported in literature, namely, using the new skills to improve practices and more importantly, enhanced student outcomes (Easton, 2008; Fullan, 1993; Guskey, 2002; Ingvarson et al., 2005; Joyce & Showers, 1980). Guskey argues that substantial improvement will happen if enhanced student outcome is made the target of PD. It has also been found that teachers who want to enhance student achievement are more likely to be involved in and benefit from PD (de Vries, van de Grift, & Jansen, 2014).

Understanding and focusing on student outcomes may be challenging for some teachers, but there is a national curriculum document which articulates learning outcomes for different subjects at different levels that the majority of teachers in the research region have not had access to so far. The education department should prioritise teachers' access to the new

curriculum and focus appropriate PD for all teachers to develop their understanding of the new requirements.

7.2.2 Valuing and Rewarding PD

System-wide recognition and reward for good teaching as well as engagement in and utilisation of PD has the potential to encourage teachers to realise the importance of PD for their career and advancement in the profession. Teachers should be required to demonstrate their ongoing involvement in PD activities, generated by a sense of accountability established through new system expectations. A minimal level of engagement in some type of continuing PD within a stated time frame should be an established requirement for teachers.

Merely making PD compulsory for teachers, however, would be insufficient without the addition of rewarding teachers for their involvement in PD activities and their attempts to implement improvements to their practices as a result. It has been argued that rewards and incentives are the significant drivers to motivate teachers towards PD (Fullan, 2014). In order to provide teachers with rewards and incentives, the system needs to establish deliberate strategies requiring a systematic evaluation of teachers. There is an existing teacher appraisal system that can be modified to contain a weighting for teachers' involvement in PD and used to evaluate the teachers' performance for both accountability and development functions (OECD, 2013). Rather than maintaining the current practice of keeping the tool and its outcomes confidential, it would be more effective if the outcomes are shared with teachers so that they have greater clarity about areas for expected potential improvement. Gradually, the system should shift away from appraisal and surveillance toward support and development.

Currently, the appraisal of teachers is the responsibility of the school leadership. Given rewarding teachers based on the outcome of the appraisal has been suggested, this process should include other professionals, such as ADEOs, who could support school leaders in a more holistic appraisal of teachers. A separate monitoring unit currently supervises administrative and financial aspects of schools. It is feasible that this team should also be given a role and responsibility to oversee academic aspects including evaluation of teachers' involvement in PD activities. This may serve to alleviate the workload of ADEOs and allow them to engage in more specific support for school leaders and teachers. The existing evaluation system in schools has remained a mere compliance due to ADEOs' workload constraints. Although they visit schools as their job description requires them paying a certain number of visits within a required time frame, they are unable to evaluate teaching learning practices and to extend required support to teachers. Monitoring and evaluation should be more than just a formality.

Once decisions are made on teachers' involvement and effective utilisation of PD through systematic evaluation, teachers should be provided incentives and rewards based on their performance. These rewards and incentives could be in the form of increment upgrades and considerations for promotion. Furthermore, high performing teachers may also be acknowledged through honouring them with titles, certificates and even words of appreciation. If PD is made compulsory for teachers and when there are opportunities for recognition, career advancement, growth and achievement, teachers' motivation towards PD will be enhanced (McMillan, McConnell, & O'Sullivan, 2016).

7.2.3 The Role of School Leadership

The role of school leadership must be expanded to explicitly include responsibilities related to the PD of teachers. Although there are many factors influencing the PD of teachers, school leadership has the potential for having the most significant influence on teachers engagement in, and utilisation of, PD (Cole, 2005b; Day, 1999; Labone & Long, 2014; K. Leithwood & Riehl, 2003). How teachers become involved in PD is determined by how school leadership values PD. Similarly, the utilisation of PD learning is determined by the learning cultures leaders create inside school.

To encourage school leaders' contribution to PD for teachers, deliberate system related initiatives are imperative. Firstly, responsibilities in this regard need to be written into the job descriptions for school leaders focusing on school-based PD, provision of feedback to teachers on their teaching and supporting teachers to plan collaboratively to address shared school issues of educational quality. Unless there are pressure and accountability from the system, however, school leaders are unlikely to take any measures to provide PD of teachers.

Simply assigning extra responsibility to school leaders, however, may not work unless the system ensures the capacity of leaders to support PD. The capacity of school leaders, first, should be considered at the point of recruitment and promotion to leadership positions. In addition, systematic capacity building of school leadership, especially those who are already in leadership roles, is critical and without which it is unrealistic to expect them to contribute to teachers' PD.

Workload may be a challenge for school leaders if they are expected to perform extra roles and responsibilities; however, their workload will be reduced through adopting a model of distributing leadership and delegating some responsibilities to expert teachers. School leaders who demonstrate support for effective PD for their teachers deserve recognition and reward for their contribution. Such rewards may be again in the form of incentives, titles and appreciation letters.

7.2.4 Resourcing PD

If the education system aims at improving student outcomes, it is critical to ensure more resources are allocated to the development of teachers. Owing to diverse background factors

identified in this study, teachers in the research region desperately need more and regular access to PD. NGOs have been providing teachers with limited free of cost PD opportunities, however, as discussed in Chapter Five, these organisations are shifting their approaches and gradually charging teachers for the PD programmes which they offer which has implications for the system in relation to the provision of resources for PD of teachers.

In addition to the extent of provision of PD, the existing resources also require more strategic utilisation. Although spending on infrastructure and material resources is equally important, compared with the quality of teachers, those expenditures may have little impact on the outcome of students. In addition, more PD opportunities for teachers can be facilitated through developing more linkages with PD providers working in the research region. Currently, officials from the education department maintain little contact with PD providers to plan and organise capacity building programmes for their teaching staff.

It is assumed that if the above system related factors are considered, there will be a greater possibility to motivate teachers to engage in and benefit from both internal and external learning opportunities. Although allocating more resources undoubtedly is an effective and easy strategy to facilitate PD activities for teachers, this research is mindful of the fact that given the will of the system, such suggestions may be idealistic and impractical. Therefore, many of the change initiatives suggested earlier namely shared standards and goals, valuing and rewarding PD, revisiting school leadership and developing linkages with PD providers are the strategies which may not require extra budget. A will to improve the situation building on their existing resources is a possible starting point.

The next section offers suggestions and strategies related to the PD providers.

7.3 PD providers

The existing dominant models of PD providers comprising brief external workshops have failed to bring any lasting change in the practices of teachers. If teachers are to be provided with more effective PD opportunities, the content and delivery procedures of the existing PD models should be revisited. Otherwise, in line with the observation of K. Patton et al. (2015, p. 39) on the conventional PD models, "To continue in the same vein is much like Einstein's notion of insanity— doing the same thing over and over again and expecting different results". Based on the findings of this research, it is suggested that PD providers should account for the views of stakeholders, enhance coordination, shift to innovative models of PD and work more on capacity building of school leaders.

These suggestions are further elaborated in the following sections.

7.3.1 Engaging the Views of Stakeholders

Professional development should involve teachers in the identification of what they need to learn and, when possible, in the development of the learning opportunity and/or the process to be used. This engagement increases educators' motivation and commitment to learn, encourages them to take instructional risks and assume new roles, and increases the likelihood that what is learned will be relevant to particular contexts and problems. If teachers are denied input to their own professional development, they are likely to become cynical and detached from school improvement efforts. (Hawley & Valli, 2000, p. 2)

In line with the principles presented in the above quote, the effectiveness of the existing PD programmes would substantially be improved by considering the views of the relevant stakeholders especially teachers on what makes PD effective for them. The features that stakeholders suggested are not only based on their lived experiences, but also well supported by the literature. As indicated by the stakeholders, PD providers require aligning their PD programmes with the real needs of teachers based on their diverse levels, career paths and respective teaching responsibilities as has been argued in previous chapters. A needs-based approach will incur costs as it requires surveying the needs of teachers and designing PD based on those needs; however, studies demonstrate that the approach could be cost-effective as it focuses attention on what matters most to teachers and, consequently, leads to enhanced quality of teaching and student learning (Antoniou, Kyriakides, & Creemers, 2015). In addition to the specific needs of teachers, other realities and conditions in schools also call for deliberation so as not to frustrate teachers with innovative ideas that are outside the scope, priorities and capacity of their school to achieve. It may not be genuine to share such theories and concepts with teachers that are not applicable in a real situation.

A clear indication in this study was that PD programmes of longer duration would be more helpful to engage teachers in active learning and to address their content and pedagogical related needs. Since the majority of the existing programmes are of very short duration, they resort to transmitting imported theoretical content through lectures which make the existing PD as 'style shows' rather than attempting to "expose teachers to actual practices as opposed to descriptions of practice" (C. Brown & Militello, 2016, p. 723). Consequently, most of the core features of effective PD will be ensured through increasing the duration of PD programmes.

Another important finding in this research was the strong support for follow-up to enable teachers to overcome their emerging issues and to sustain new practices. Teachers lack supportive conditions at the school, thus, in the absence of follow-up support, they either fail to implement their learning or gradually revert to their traditional practices. If a teacher has tried independently to implement a new approach and if the approach does not work due to his/her inexperience and lack of support, the teacher is less likely to engage in the PD unless these experiences are aired and discussed and trust is built.

The critical question at this stage would be how to afford such ideal programmes. There may be some possibilities and opportunities to overcome this issue. First of all, the resource issues may be addressed if the system values and rewards PD. It might be assumed that should PD be made compulsory for teachers and is included in an explicit teacher and school appraisal system, teachers would be more likely to approach PD providers with their respective needs. Such a change would reduce the PD providers' situation analysis costs. Teachers will be more willing to pay for the programmes they attend if PD is valued and rewarded by the system.

Another important strategy that would address resource issues would be to focus on quality rather than quantity (Desimone et al., 2002). For example, instead of offering three hours course to 100 teachers, a ten-day course may be offered to 15 teachers who are also assisted to be catalysts of change when they return to their schools. Utilising resources on 15 teachers who will bring some improvement in their practices is much better than using the same resources on 100 teachers who fail to bring any improvement.

Lastly, resources will also be saved and used more effectively if PD providers work in collaboration. As revealed earlier, there is an overlapping in many programmes since PD providers work in isolation without considering what others are offering. They have rich expertise and resources to share and benefit from. Through sharing their plans, expertise and resources, they would be able to exert more impact with limited resources. Consequently, the existing resources would be utilised more effectively through coordination and collaboration.

7.3.2 Coordination with Education Department and Schools

The effectiveness of the existing PD programmes would also be significantly improved through enhancing coordination and linkages with the education department and schools. The education department, especially ADEOs who monitor teachers, need to be involved in planning and implementing PD programmes. Lack of coordination with education department leads to the selection of unrelated teachers and opposing expectations from teachers.

All stakeholders need to collaborate in the planning and implementation of PD activities in coordination and agree on their respective roles and responsibilities. Linkages between PD providers and schools will be helpful for school leaders to make teachers accountable for the implementation of learning. Officials who monitor teachers are usually unaware of what teachers are expected to implement as a result of attending PD. PD providers assume that the education department or school leaders will monitor implementation of learning. If that is the expectation, it should be clarified on prior basis so that all parties will have a shared understanding of their roles and responsibilities. In addition, PD providers should be in constant contact with school leaders in order to understand the needs of their teachers and to ensure that teachers are implementing their learning.

7.3.3 Shifting to Innovative Models of PD

Teachers would be more likely to be engaged in ongoing learning experiences if there was a shift from external workshops to contemporary innovative models of PD. As revealed in preceding chapters, teachers in the research region are afforded with only conventional external workshops that are brief, sporadic, transmissive and lack relevance to the real needs of the participating teachers. It has been concluded that little return can be expected on our investment if more money and time is spent on traditional forms of PD that are remotely related to the challenges of teachers (Darling-Hammond, Holtzman, Gatlin, & Heilig, 2005). Since PD providers are the agents who have the major role and responsibility in introducing the reform initiatives, it is timely for them to introduce innovative models of PD. PD providers should intervene as the catalyst of change rather than information transmitters or sustainer of the status quo.

The first step in shifting from traditional to reform models would be developing awareness among teachers and school leaders concerning the importance and possibilities of school-based learning. Teachers have a preference for traditional models because they perceive that change is brought about through the influence of external factors (Webb, 1993). PD providers reinforce this perception through providing teachers with only external activities. PD programmes need to engage teachers and school leaders in critically reflecting on their perceptions on how and where learning happens and how could they engage in PL activities in their respective schools (Givvin & Santagata, 2011). Once teachers and especially school leaders revise their perceptions and develop a reflective skill, they are more likely to be engaged in school-based learning activities.

The second revision in the existing models of PD would be intervening in schools through whole school improvement initiatives. As revealed earlier, even if well trained, an individual teacher not only fails to influence other teachers but also faces challenges in implementing his/her own learning. It is because the collective beliefs and practices of schools are stronger than the beliefs and practices of an individual teacher (Opfer & Pedder, 2011a). It has been argued that PD is effective if it focuses on improvement of whole organisational capacity instead of an individual teacher (Newmann et al., 2000). Whole school intervention will not only enable addressing specific issues of schools and teachers but also allow collective participation which has been considered a core feature of effective PD (Desimone, 2009).

Ideally, PD providers need to work with individual schools to develop their capacity based on their unique needs and realities. This initiative might be costly. However, if PD is valued and rewarded, schools may approach PD providers seeking such interventions. Otherwise, PD providers may also experiment with individual models such mentoring or peer coaching or reflective practice, and support teachers in implementing these models. Selecting any specific

model may depend upon several factors. In some schools, teachers may be willing to learn from one another. Peer coaching may be more appropriate in this situation. Mentoring may be more suitable for a school where senior teachers are willing to support novice teachers. In the absence of these conditions, introducing reflective practice may be an effective model as a start. PD providers should experiment with individual models and evaluate their impact on the practices of teachers. To decide on any effective model, the models need to be trialed and evaluated before full implementation to ensure that they account for the contextual factors (Hill et al., 2013).

It is also worth considering that a total shift from external to internal PD may not be feasible given the existing realities of the schools and teachers in the research region. For example, the existing workload of teachers, especially at primary level, may not allow them to participate in school-based PD activities. For collaborative professional learning practices, teachers require time to meet (Admiraal et al., 2016). Similarly, school based learning activities may flourish if teachers possess required knowledge, skills and capacity. If teachers are expected to learn from one another, their learning will be limited to the knowledge and experience of the group (Hoban, 2002). As Hawley and Valli (2000, p. 3) observe, "Innovation is constrained if informed only by those who share similar ideas and experiences". Given their reduced capacity, teachers in the research region require more exposure to external ideas, which necessitates their interaction with external sources (Nawab, 2014). Teachers require external support because they need to learn fresh knowledge and skills, and to reflect on their practices in new ways (Timperley, 2008). External expertise would challenge prevailing beliefs and practices (Doolittle, Sudeck, & Rattigan, 2008), and thus will be helpful to initiate and sustain PL cultures (Bissaker, 2014).

In addition, the existing cultures and attitude towards PD may not facilitate a sudden shift to school-based learning activities. For example, when teacher development activities are grounded in the work context, it is vital for senior and novice teachers to be engaged in a mentoring relationship. However, if seniors do not want to change their practices, as revealed in this research, they may not be ideal mentors for the novice teachers. Consequently, relying only on reform models of PD may not be practical at this stage. Approaches to PD in the research region needs to be a blend of both conventional and reform models.

7.3.4 Capacity Building of School Leadership

There is a greater possibility to create and sustain PD cultures and structures in schools through developing the capacity of school leaders. Whether PD providers continue with external models or shift to innovative ones, an agent who will have the greatest influence on those models is the school leadership. Even if the PD providers consider the views of stakeholders and provide teachers with PD having the proposed features, the transference of learning from PD to classroom depends upon school conditions. Similarly, teachers participate in school based PD

activities if the school environment is facilitative to learning, and colleagues are willing to extend support (Evers et al., 2016). It is the school leadership who creates and influences all those conditions. Unless schools have leaders having required expertise and attitude, achieving the goal of effective PD is very unlikely. The priority of PD providers, therefore, should be developing school leadership. Research suggests that "principals need to be educated about how to select the best forms of PD for increasing teacher capacity" (C. Brown & Militello, 2016, p. 723).

Presently, the majority of the school leaders who participated in this research lack not only awareness regarding the importance and possibilities of PD but also knowledge and skills to support teachers to successfully engage as professional learners. Building on the existing situation, the capacity building programmes for school leaders, thus, may include the following themes. PD providers may modify or add to these topics through assessing the realities and needs of schools and their leaders.

- Reflection on how learning happens in relation to adult learning theories
- Creating learning cultures and structures in schools
- Introducing the possibility of school-based learning models
- Designing and implementing school based learning models
- Managing change
- Transformational and instructional leadership
- Introducing distributive leadership models

School leaders face many challenges in bringing sustained change in their schools. However, if the system values PD, makes teachers and school leaders accountable and rewards their participation in PD, teachers will be committed to improving their practices, which will facilitate school leadership in overcoming many of the challenges. Both officials of the education department and PD providers should also extend ongoing support to school leaders in designing and implementing their PD models. The recommendations presented above are summarised in Table 7.1 below.

Table 7.1 List of the recommendations for the System and PD Providers

System	PD providers
✓ Agree on standards for teachers and outcomes for PD	 ✓ Engage views of stakeholders to decide on content and delivery of PD
 Recognise, value and reward teachers' involvement in and utilisation of PD 	 Enhance coordination with relevant stakeholders
✓ Establish commonly held role for leaders	✓ Shift to more innovative and PL models
✓ Utilise more resources on PD of teachers	✓ Focus on capacity building of leaders

7.4 Conclusion

This chapter suggested ways and strategies to provide teachers with more effective PD opportunities. The chapter showed that the change initiatives should start from the system. Stakeholders should agree on standards for teachers and outcomes for PD. In addition, unless the system values and rewards PD, teachers are less likely to benefit from external PD or to be engaged in PL. Since the attitude of teachers is the major factor determining their involvement in PD, value and reward systems will motivate them towards PD. The system also requires revisiting the role of school leadership. Rather than restricting leadership to an administrative role only, school leadership should be made responsible to actively contribute to the PD for teachers. Once the system related factors are favourable, there is a greater possibility for teachers to improve their practices being involved in external and internal PD activities.

Similarly, PD providers have the potential to be far more effective should they revisit their approaches and models based on the experiences and views of the key stakeholders. Their existing models which are external, brief, theoretical and less informed by the real needs of teachers have largely failed to positively impact the practices of teachers. Teachers require more relevant, sustained and active learning experiences. Moreover, it is also timely to shift from traditional to innovative models of PD so that, instead of relying on external workshops, teachers will be engaged in ongoing learning and would find solutions for their context specific issues. Lastly, coupled with focusing on the individual needs of teachers, PD providers should refocus to work on developing the capacity of school leaders. Without effective school leadership, achieving the goal of effective PD is highly unlikely. If the system and PD providers work in collaboration and perform their respective roles suggested above, there is a greater possibility to provide teachers with more effective learning experiences and subsequently improved learning experiences and outcomes for school students.

The next chapter concludes the discussion and highlights the contribution of this research to existing knowledge, suggests areas for ongoing research and reflects on the experiences of the researcher in conducting the research.

8. CONCLUSION

Education research is at a stage in which we have strong theories of *student* learning, but we do not have well-developed ideas about *teacher* learning, nor about how to help teachers incorporate new ideas into their ongoing systems of practice. (M. Kennedy, 2016, p. 973)

8.1 Introduction

This chapter commences with a brief synthesis of the main findings of the research. Next, it highlights the contribution of this research to existing knowledge on PD. The chapter then briefly shares the researcher's experience of using grounded theory in this research. Some cultural aspects which researchers in the region might consider are also presented. The limitations of the research are also discussed and lastly, the chapter highlights some potential areas for future research.

8.2 Effective PD for Teachers in Rural Pakistan

Aiming to understand what makes PD effective and valued for key stakeholders in rural Pakistan, this research found that stakeholders value a PD programme which has relevance to the real needs of teachers, focuses on both content and pedagogy, involves active learning experiences, extends over a long period and involves follow-up support. Interestingly, most of these features are also well supported by research literature from developed countries. However, except for a few examples, the majority of PD activities on offer for teachers in the research context lacked these features. The research also found that the effectiveness of a PD activity is not confined to the design and delivery features. A range of contextual factors equally influence the quality of PD. Dependence on external workshops, limited recognition of ongoing learning and development, and the limited role of school leadership in PD of teachers were contextual factors which influenced not only the possibility and effectiveness of PD but also the transference of learning to the classroom.

Drawing on these findings, this research argued that PD is a complex process having many mediating forces. A PD activity may not be termed effective or otherwise based on its design and process features alone. As complexity theorists (White & Levin, 2016) and activity theorists (Engeström, 2001) suggest, an activity has many agents with their own rules and roles bringing different implications for the structure and outcomes of the activity. The design and processes of PD activities, in the research region, are influenced by the assumptions and goals of PD providers. They intervene with the seeming assumption that what works in another context can

equally work in this context. Their intervention is also based on the assumption that improvement will be brought if local instructional practices are replaced with more child-centred pedagogies. Aiming to achieve this objective, teachers are provided with brief external workshops mainly focused on pedagogy. Teachers are expected to implement child-centred pedagogies without being provided with demonstrations of how such an approach is feasible and possible in their own classrooms. Without authentic learning experiences such as observing the new theories in action, teachers fail to implement the new pedagogies in their classroom.

A critical factor is that PD providers lack understanding of the real issues that teachers face and the specific support they need to address those issues. The existing programmes are like medicating a patient without diagnosing the disease. Teachers who are expected to implement the innovations have no say in the design and delivery of these programmes. Only PD providers decide on what to offer and how to offer the PD, and this is generally based on traditional models of external one-off workshops. Consequently, the irrelevant foci and episodic approaches of the PD provided resonate with that which is reported from other low-income countries in which:

the dominant pedagogical stance remains one where trainees are largely regarded as 'empty vessels', with little knowledge or experience of teaching, who need prescriptive advice and guidance from lecturers about how to teach, whether or not the prescriptions appear to suit the learning contexts in the schools where trainees work or the demands of new curricula. (Lewin & Stuart, 2003, p. 699)

The situation is further exacerbated by other systemic forces that are more powerful than PD providers in relation to determining the effectiveness of PD. Historically, an assumption regarding teachers and teaching has prevailed in the research region, namely, that anyone can be a teacher and teaching can be carried out without preparation. This perception has resulted in recruitment of individuals to the teaching profession who lack vital knowledge, skills and attitudes for effective teaching. Initial education in Pakistan has been considered outdated and too theoretical to prepare teachers for effective teaching and the system lacks any arrangement for their ongoing development. Development is associated with accidental, uncoordinated external workshops that restrict any possibilities of focused and needed workplace PL. Furthermore, the system lacks any recognition, value or reward for PD and as a consequence, the majority of teachers disregard learning and development. School leaders are also the product of the system that does not recognise the important role they could play in teachers' learning. As such, school leaders not only disregard PD but often lack capacity and expertise to support teachers in their learning and implementation. Given these scenarios, even attending PD is unlikely to make a difference in the practices of teachers.

These insights have implications for the system, PD providers and academics. Based on the analysis of all factors influencing the quality and outcomes of PD in rural Pakistan, it is argued

that the most significant shift needs to happen at the system level. Change at the system level should result in changes in other influential forces such as PD providers, school leadership and teachers. System level changes should include a review of the profile of teachers and the recognition of their involvement in PD as a priority for development and progression in their careers. Such a change will act as an external motivation for teachers to seek PD opportunities whether they are internal or external. In addition, the system should also revisit the job description of school leaders shifting beyond administrative roles to pedagogical leaders with a responsibility for improving the quality of their teachers' knowledge of effective teaching and learning. Assigning such responsibilities to school leadership, however, may not be helpful unless individuals at the leadership level possess the capacity, expertise and motivation to be pedagogical leaders. The system should recruit or promote potential individuals to school leadership and ensure they access PD programmes which focus on developing their knowledge and skills as pedagogical and transformative leaders.

The implication of this research for PD providers is that without engaging the views of stakeholders, it is highly unlikely there will be any positive impact on the practices of teachers. Developing a teacher means helping him or her to overcome real classroom needs and issues. Therefore, interventions to develop teachers should be informed by the real needs and issues of teachers. Another recommendation from this research is the importance of involving teachers in active learning experiences, so they are able to transfer their learning directly to their classroom. Trialing new ideas in an authentic setting and observations with immediate feedback are active learning experiences that allow teachers to transfer the learning more readily to their own classrooms. Perpetuation of a transmission model of PD will only reinforce teachers' use of the same approach with their students. PD providers should also be mindful of the fact that without follow-up support teachers fail to implement and sustain any new practices.

Moreover, PD providers should design and deliver their programmes based on the latest research about teacher learning. It is timely to shift from one-off external workshops to more innovative and school based PL models. This shift may start from external workshops through targeting the perceptions of teachers with regard to how and where learning happens. Next, PD providers should work with school leaders to develop whole school improvement projects and plans as well as school-based PL models. This research highlighted some examples of school-based learning in a few private schools, and this suggests that the seeds of knowledge creation are evident but they require the right conditions to grow and develop (D. Hargreaves, 1999). One of the significant forces that will continue to influence those conditions is school leadership. Unless quality school leadership is supported and developed, it is unlikely that high-quality school-based learning opportunities would be available to teachers. As such, this research

reiterates the importance of addressing the roles of school leaders and providing them with PD to support their ability to create rich learning opportunities for teachers in their very own schools.

Lastly, academics and practitioners should consider context and contextual realities while attempting to replicate learning models. The importance of Western generated models and theories cannot be denied; however, they should not be taken as prescriptions without examining the contextual realities of the host countries (Ali, 2014; Örtenblad et al., 2012; Saeed, Zulfiqar, Ata, & Rathore, 2015). Even in Pakistan, there is a huge diversity in culture, schools, school leaders and the quality of teachers. The realities of teachers in rural Pakistan are quite different from their urban counterparts. Approaches toward PD of teachers in a reform-oriented context may not be applicable to rural Pakistan. While attempting to generalise features of effective PD, academics should be mindful of the contextual differences.

To conclude, the low attainment of students in rural Pakistan calls for more attention toward the quality of teaching noting that compared with other variables, student attainment is highly dependent on the quality of teaching (Darling-Hammond, 2004). The existing approaches to PD, however, are compliance focused and as such less successful in providing teachers with effective PD opportunities. Neither PD providers nor the education system itself has taken any serious and systematic measures to address the dearth of teacher quality. New approaches to PD for teachers in rural Pakistan should be vastly different to that which has been reported in this research. However, an individual or one party alone will not be able to bring about the required changes given the complexity of the situation.

A significant initial step that will facilitate the process of change is a disposition for deliberation (Trede & McEwen, 2016b). All the relevant stakeholders have to approach PD as deliberate professionals who are both thinkers and doers "where the thinking informs the doing and the doing informs the thinking" (Trede & McEwen, 2016b, p. 7). Stakeholders have to question and deliberate on their beliefs, assumptions and practices in regard to PD of teachers. Instead of accepting established taken for granted assumptions, critique of the prevailing unreflected notions, conditions and practices is essential to achieve the required improvements (Trede & McEwen, 2016a). Why is PD important, who decides on content and delivery of PD, what are the effective models of PD, what should teachers learn and how will they be supported to implement their learning, how can one evaluate the extent that PD contributes to students' attainments and how can stakeholders work together to provide teachers with more contextually relevant PD? These are serious questions which all stakeholders should deliberate upon. With a serious commitment from all stakeholders for change in the quality and recognition of teachers' PD, the beneficiaries will be many, most importantly the students in rural Pakistan whose future totally depends on quality education which has been denied to them so far.

8.3 Contribution of the Research

This research makes many significant contributions to the area of PD. First of all, the concept of PD is highly regarded in developed countries owing to the novel challenges brought to teachers by constantly changing demands of schooling and diversity of students (Darling-Hammond & Bransford, 2007). The importance of PD is even greater in developing countries especially in the research region where teachers have neither access to quality pre-service teacher education nor within school support and development. If the quality of education is to be improved in rural areas, the PD of teachers should be a priority area for attention and action.

This research was not only the first of its kind to be undertaken in the region, but it also listened to the voices of all relevant stakeholders on a very significant topic for rural Pakistan. For too long, critical stakeholders, particularly teachers, have been voiceless. This research provided them with a voice. Listening to the teachers proved to be a cathartic experience for them as they were able to freely express their strong feelings and release their emotions. Some participants shared these feelings with the researcher stating that this was the first time their views were listened to and cared about. It is hoped that by listening to these teachers their motivation and commitment for improving their teaching practices will be enhanced as revealed in the educational literature (Hawley & Valli, 2000). However, this is more likely to be observed if as a result of this research, there are changes to the opportunities to participate in high-quality PD for these teachers and their commitment to PD is recognised. The researcher is optimistic that the voices of the relevant stakeholders will be well heard through the outcomes of this research.

This research inspired teachers to reflect on their approaches towards PD. When they were asked about school-based learning opportunities which they were involved in, it made them reflect on their approaches to PD and the numerous possibilities of learning in their school context. Thus, the research itself may have been catalytic, provoking thoughts about various forms of learning and it is hoped that an ongoing deliberation about the potential of school-based PD continues as an outcome of this research.

The research also showed that if involved, stakeholders, especially teachers, provide rich insights to draw upon for future design and implementation of high-quality PD programmes. Teachers should not be treated as passive receivers of reform initiatives (Day, 1999; Flores, 2005). They possess rich experiences of what works and what does not work. Similarly, if all stakeholders work together sharing their views and experiences, there is a greater possibility of providing teachers with effective PD. Based on their real experiences, stakeholders revealed those core features and context related factors that, if considered, should dramatically improve the quality of PD opportunities.

The empirical evidence generated by this research can also contribute to the existing debate on the issues of importing and generalising Western theories and models. The research showed that change agents working on capacity building of teachers in this region intervene with their own assumptions without considering the needs and realities of teachers. The research found that the systemic factors are more powerful than the design and process features of PD. Change agents working on capacity building of teachers should be informed by the contextual realities. The research lends strong support to the view that context is the determining factor in PD of teachers.

Finally, this research developed recommendations for ways in which to improve the existing situation. These ways include recognising PD, empowering and developing school leaders, engaging views of stakeholders and shifting from PD to PL. The research suggested that instead of providing PD for the sake of PD, stakeholders should seriously deliberate on their assumptions and practices. If the insights emerging from this research are not considered, the consequences of continuing with the existing approaches and models of PD will only serve to reinforce the prevailing conditions and poor outcomes for students. Representatives of the education system itself must recognise that investing in improving outcomes for students should commence with improving the quality of teaching. High-quality PD is the foundation to improving teaching quality and as such significant investment should be made in transforming existing approaches to PD in rural Pakistan. Neglecting the PD of teachers may result in failure of other educational initiatives.

8.4 Using Grounded Theory

Using grounded theory to research PD of teachers in rural Pakistan was an interesting but challenging experience. Charmaz (2014) has documented several challenges related to using grounded theory in different contexts. One major challenge is being a stranger to the research region and research participants. As Charmaz has revealed, in some contexts, individuals converse ambiguously with outsiders. Similarly, if an interpreter is used, data may lose meaning during translation. Since I belonged to the research region, these issues did not affect my research. Being familiar and known in the research context created a sense of trust from the research participants and provided rich data on which to generate the research findings. I did, however, confront a theoretical issue related to using grounded theory in my research.

I started my research with interpretivist and constructivist lenses (Lincoln, Lynham, & Guba, 2011) aiming at understanding effective PD from the perspective of my research participants. I used grounded theory as my diagnostic and analytical framework with the intention to generate a theory of effective PD from the views of the stakeholders. During data analysis, while relating the emerging data with the literature on PD particularly with the reforms models, I started

questioning the fitness of grounded theory. For example, when I interpreted the views of my participants and tried to construct a theory from their views, it was more likely to generate a theory of PD which was contrary to how PD was theorised in recent literature. To explain further, participants' views on PD were traditional and had little experience that might prompt them to refer to reform models of PD. Generating a theory of effective PD based only on their views was, in some way, ignoring the possibilities of emerging reform models of PD. Participants never referred to, for example, collective participation, collaborative inquiry or any other form of school-based professional learning models. However, their responses indicated a preference for working with others.

My understanding of grounded theory evolved in line with revisiting 'constructionist' grounded theory (Andrews, 2012; Charmaz, 2008). While discussing the process of theory generation, Charmaz (2008, p. 402) argues that "the researcher and researched co-construct the data Researchers are part of the research situation, and their positions, privileges, perspectives and interactions affect it". Consequently, the final theory I developed regarding effective PD for the research region also included a suggestion to shift from traditional to innovative models of PD. Thus, I developed the theory based on not only the views of my participants but also my engagement with recent literature on teachers' PD and PL. It suggests that if a researcher using grounded theory is only situated as a reporter or interpreter, then the outcomes are limited. A theory should, therefore, be co-constructed and I believe this has been the outcome of this research.

8.5 Cultural and Social Aspects

Conducting research in rural Pakistan was insightful with regard to some cultural and social aspects peculiar to that region. Being aware of these aspects might help researchers to intervene and conduct research in this region in a more informed way. One of the cultural aspects which influence data generation is the culture of avoiding disagreement. Like other Asian countries (see, for example, Hofstede, 1991; Nguyen et al., 2009; Walker & Dimmock, 2000), individuals in the research region abide by the concept of face saving and emphasise harmonious relations. The implication of this cultural aspect is that in focus group interviews, once a member of a group shares a perspective, it is agreed upon by all the members of the group. The situation may be further complicated if members of one group belong to different hierarchies such as seniors and juniors or a teacher and school leader. Consequently, using focus groups would be challenging if a topic requires surfacing alternative perspectives to generate some deeper insights. A researcher may overcome this issue through forming groups of similar ranks, sharing expectations before interviews and encouraging alternative perspectives during interviews. Similarly, a researcher needs to interview as many groups as possible and to use a variety of data collection tools. Relying on interviews with a few groups

may not yield rich data especially when the purpose of the research is to generate a theory of relevance for the whole population.

Another social and religious aspect to be acknowledged is gender. The majority of women especially in the lower areas of the research region observe pardah¹⁶. The interactions of males and females who are not maharam¹⁷ to one another are discouraged. However, if interacting with such men is inevitable for women, they wear a hijab¹⁸. Moreover, a patriarchal social system prevails in the region where women still depend on men for taking any decisions. A researcher should consider these social and religious norms while recruiting female participants, interacting with them and arranging a venue for interviews. Moreover, given this knowledge, a mixed group of men and women is not recommended if seeking women's personal views as it not only disregards the social norms but also leads to less productive discussions as women hesitate to share their perspectives in the presence of men.

8.6 Limitations of this Research

Although this research presented an in-depth analysis of PD in rural Pakistan, it has several limitations. Firstly, where the ultimate aim of PD is to enhance student achievement, this research did not assess the impact of existing PD programmes in relation to their contribution to student achievement. Certain PD programmes were reported as having the core features of high-quality PD; however, collecting evidence to understand how those programmes contributed to the enhanced achievement of students was beyond the scope of this research. Secondly, this research relied on interviews to assess the effectiveness of PD programmes. The researcher did not observe the practices of teachers who accessed the PD programmes. Such observation might have produced more in-depth data to understand the differences between the practices of teachers who accessed PD and those who did not.

Thirdly, the views of parents and students were not assessed. Both groups might have distinct views on the effectiveness of PD. Parents were not included with the assumption that they have no role in PD of teachers. However, the research highlighted the influence of parents on teachers. For example, one of the extrinsic motivating factors driving teachers of the private schools toward improving their practices was the relatively enhanced pressure of parents with children in those schools. Similarly, students might have been in a position to share perceptions on differences between the teaching of teachers who accessed PD opportunities and those who did not. Students might also have indicated improvement areas in the practices of teachers that

¹⁶ A religious and social practice of female seclusion prevalent among some Muslim communities.

¹⁷ Mahram is a kin with whom marriage/sexual intercourse would be considered haram (illegal) in Islam.

¹⁸ Complete covering of everything except the hands and eyes.

could be a target for PD providers while deciding on content for their programmes. This was, however, beyond the scope of this research.

Lastly, the research may not be generalisable beyond the boundaries of this research because the findings are unique to the cases in the particular region at the time of the research (Fraenkel & Wallen, 2003). For example, this research was limited to PD programmes accessed by teachers after their entry into the profession of teaching. Although there may be many learning points for those who arrange pre-service programmes, the findings of this research may not be generalised to them. Similarly, this research was limited to Chitral District and PD providers working in this region. The situation in other districts may be different because a considerable number of NGOs have been intervening with their own unique models in different regions of Pakistan. Given the similarities among systems, this research may provide insights to PD providers working in other regions of Pakistan to reflect on their practices, but this would be dependent on whether people reading the research will find it relevant to their context.

8.7 Future Research

The region in which this research was conducted lacks a research culture. Its remoteness precludes people from choosing it as a research site. The issues related to education and PD of teachers have mainly remained unexplored. In this scenario, researching PD of teachers raised many questions and areas for further exploration and investigation.

This research highlighted that a major factor which necessitates regular and ongoing PD for teachers in the research region was the poor quality of existing pre-service qualification programmes. Research participants reported that these programmes did not equip teachers with relevant practical ideas to implement in their real situation. Consequently, teachers require access to CPD to address their knowledge and skill gaps. In recent past, with the assistance of USAID, the existing pre-service programmes have been modified aiming at the development of better-qualified teachers based on the National Professional Standards for Teachers. The modified pre-service programme has also been implemented in the region where this research was conducted. Researching the modified programme is recommended with a particular aim of understanding: differences between the new and previous programme, the curriculum foci of the new programme, how this programme prepare teachers for their future teaching contexts and what makes this programme effective or ineffective? Answering these questions would be of importance not only to understanding how to more effectively prepare beginning teachers but also to consider what ongoing PD programmes will be needed to complement initial teacher education programmes. Such research may also inform PD providers regarding what features contribute to the effectiveness of PD.

Another interesting and timely research focus would be exploring the possibility and challenges of innovative PD models. Recent trends in PD of teachers stress grounding teacher development activities in the workplace. Building on those trends, this research suggested some measures for PD providers to revisit their existing programmes in order to facilitate teachers with workplace learning models. In pursuit of this shift, two types of studies are suggested for the future. Firstly, this research found that in some schools there was some evidence of schoolbased learning. In one school, there is a culture of sharing and learning from one another. As a teacher from that school remarked, what he learnt from other colleagues in that school was more relevant and important than any other experiences during his whole education and professional career. Studying these examples of school-based learning to understand what drives them and what facilitates those experiences will be helpful to build upon while introducing and sustaining reform models of PD. A second connected study could be action research involving the teachers. School-based action research projects could focus on implementing a range of PD models including reflective practice, professional learning community, mentoring, peer coaching or classroom observation. Through employing an action research model, the outcomes of implementing these models in local schools could be evaluated as to how school leaders, teachers and organisational structures support or inhibit creating a culture for effective schoolbased learning.

The workload of school leaders was reported to be one of the hindrances in facilitating school-based learning activities for teachers. As such, research which shadowed school leaders in the research context to gain a more comprehensive understanding of their roles, how they spend their time and the potential for them to become pedagogical leaders would also be of importance if school-based professional learning was to be successfully implemented in rural Pakistan.

This research documented that some of the existing PD programmes contained the core features of effective PD proposed by the stakeholders as well as by literature. Although participants valued those programmes, this research lacked scope to reveal their contribution to the achievement of students. Studying student achievement through comparing the students of teachers who accessed those programmes and those who did not could lead to identifying the extent to which the programmes having the core features enhanced student achievements. Moreover, such studies could also lead to understanding what particular features are more effective than others in enhancing student achievement. Consequently, PD providers would be in a position to utilise more resources and energy on those features which have a greater impact on student achievement.

Finally, replicating the same research in other regions of Pakistan would reveal how the experiences and views of stakeholders on the effectiveness of PD may vary within the same

country. Such research could also expose how PD providers within the same country intervene with different models.

The research concludes with an insight from Darling-Hammond (2017):

The teaching challenges posed by higher expectations for learning and greater diversity of learners around the globe will likely be better met if nations can learn from each other about what matters and what works in different contexts. These efforts can benefit from researchers, practitioners and policy-makers building a deeper understanding of the possible strategies for making major improvements in teachers' learning opportunities and a clear theory of change for how to bring these strategies about. While there are many different roads to the same ends, they should ultimately be judged by the extent to which they demonstrate potential to build powerful and equitable learning systems for students and teachers alike. (P, 307)

THE END

APPENDICES

Appendix A: Map of Pakistan



Appendix B: Interview Guide for Teachers

- 1. Please tell me about your learning experiences, focusing the best learning experiences and the worst learning experiences.
- 2. What features of PD or professional learning experiences were effective and less effective to enhance your learning and practices?
- 3. Based on your experience of being involved in PD, what criteria do you use to determine the effectiveness of PD and why?
- 4. What ideas and strategies acquired during PD did you implement in your classroom and what were not applicable and why?
- 5. What do you believe would be more effective in ensuring you can apply learning from PD in your classrooms?
- 6. What do you suggest will improve the quality of professional development?

Appendix C: Questionnaire

Sector:	Gender:
Experience:	Position
Note: Please provide the followin	g information according to your best knowledge. Kindly be
specific.	
PD programmes that you	
have been involved in during the last 3 years	
Definition or meaning of PD for you	
Purposes of PD	
Outcomes of PD	

Appendix D: Sample of Evaluation Form Filled in by a Participant

and will highly be approved		-23	24			-	-		Service 1
Trainer: Clearly communicated tru	ining object			ENVIORE	V. thead	Claric	Ameri		HARE
		-		Excellent	v chia	Good	Averag	P. At	SON UNKER
Introduced the topic in a l			0.0	Excellent	V. Good	Good	Averag	E A	- CENT
Presented the material un		25.60	Tale	Escelant	V. Good	Good	Aven	DE A	STREET,
Hed command of the sub	AND DESCRIPTION OF THE PERSON NAMED IN	SUPERIOR STATE		Excellent	V. Good	Good	Avera		ALC PAR COMM
Gave daily life examples	4.50	Jen-Jender	24	Excellent	V. Good	Good	Aven		clow version
Used teaching aids office		- 2 March Colores	234	Exorless	V. Good	Good	Aven		Lichary Lichary
Presented the session in		d mariner	×41	Exclini	1/2		Ave		Scient August
Used the available time	effectively	42,1263.2	(4)		1	-			Below
Provided equal attention	n to all parti	cipants Straight	100	Exclos	10000	1	-	4	Bdzw
Responded appropriate	y to the que	stions	Car	Backet	-			102	Average Scions Average
Started the session well	in time	42.000		Escelia				2300	Shekew Average
Achieved the defined to	raining obje	Clives March 2	100	Euclin	1 4.000	-	100		No.
ne Session provided:		43	KEN			2 6		votes	7 Belo
Appropriate amount of	work	states.	المراث	Excelle				- Contract	Belo Ave
Interesting learning act	gvities	Landin	- Shall	Duelle	NO.		1	Average	Belo
Practical examples to		中国というながだ	مان را ال	Escella				Average	36
Active participation in		41340000193	220	Excli			-		36
Link between objective	es and activ	ities Springerings	V237	Esculi	at V.G	ood M	ood	Anong	AN
Addition to my knowle	Annual sh	ills Had Nichard Ha		Street, Street	- V.G	ood (mod	Averag	
omments / Suggestions			م و تهاه						
This type 9						anturs	= +	الما	
		Should should						dire	
luvelue of for	- The	Sessie	100	-					

Appendix E: Example of Quantitative Data Recoding from Evaluation Form

	The trainer	Excellent	V. Good	Good	Average	B. Average
1	Clearly communicated training objective	116	58	16	0	0
2	Introduced the topic in a lively manner	118	59	13	0	0
3	Presented the material understandably	88	56	43	2	1
4	Had command of the subject matter	110	58	20	2	0
5	Gave daily life examples on the concept	111	47	28	3	1
6	Used teaching aids effectively	93	58	37	2	0
7	Presented the session in an organized m	101	65	18	6	0
8	Used the availabe time effectively	108	58	22	2	0
9	Provided equal attention to all participa	108	53	20	5	4
10	Responded appropriately to the questio	100	55	27	8	0
11	Started the session well in time	118	39	22	11	0
12	Achieved the defined training objectives	99	66	19	6	0
	The training session	Excellent	V. Good	Good	Average	B. Average
1	Appropriate amount of work	91	63	31	5	0
2	Interesting learning activities	98	60	28	4	0
3	Practical examples to clarify concepts	96	70	20	4	0
4	Active participation in learning	97	59	31	3	0
5	Link between objectives and activities	98	59	29	4	0
6	Addition to my knowledge and skills	108	59	20	3	0

Appendix F: Example of Qualitative Data from Evaluation Forms

The trainer taught us effectively and conveyed important information and developed in us the sense of responsibility of an effective teacher.

Training provides us an opportunity to share our ideas with trainers.

Training is very useful for us to know about new strategies of teaching learning processes.

Because of the less number of participants, the course was not interesting.

We learnt to do things through new techniques. If PD organizations provide such with more such trainings, it will be very good. Moreover, the duration has to be longer.

Training was good but time was very short.

Duration was very short. The PD organization is requested to increase duration of training.

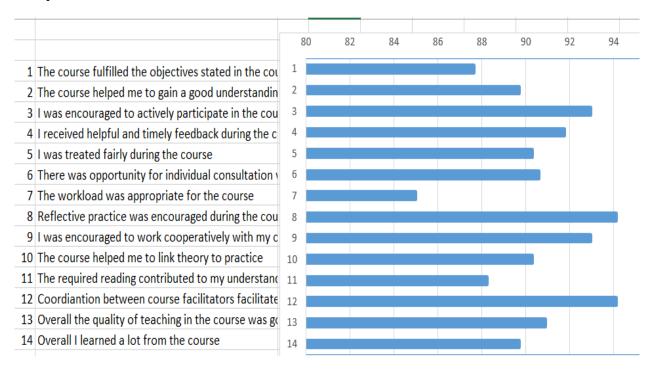
The duration of training needs to be increased.

Duration of the training was very short and it should be increased.

The time was very short and we need more opportunities

Trainings need to be according to the new educational policies and in proper time for example duration vacation. Trainers need to provide training to all teachers according to effective skills. The new techniques that we learnt in this training will be very useful for students.

Appendix G: Developing Quantitative Part of Evaluation Forms into Graphs



Appendix H: An Example of Source Memo

For the second interview, I called six female teachers. Because of the cultural factors and to make the CPs more comfortable and secure, I selected a girl school as the venue for the interview. Five teachers attended the interview. I noticed that they took around 25 minutes to fill in the questionnaire. While filling the questionnaire, they asked me some questions to clarify some of the points in the questionnaire. It suggested that novice teachers need my presence when they fill in the questionnaire. While interviewing them, I again noticed that when I was asking the first question, they were responding even to the questions that were to follow. However, I didn't interrupt, and I let them share whatever they wanted to share. I asked those questions at the end which I felt were uncovered during their talk. In the previous group, we sat together for refreshment. Since some of the teachers in the current group were in a veil (hijab), I let them alone when they were having refreshment. It is because some ladies in this context cover their faces when they interact with males.

Most of the insights that emerged from the interview with this group were the same that had been reported by the previous group such as PD addressing needs of teachers, the importance of practical ideas, lack of coordination among stakeholders and some issues related to parents. This group, however, highly stressed upon the importance of applying the acquired skills and ideas in their classroom. They reported that what is presented to them during a PD programme is an ideal situation while their school and classroom realities are totally different. Consequently, they fail to implement most of the ideas. They suggested that the PD providers have to keep in mind the classroom realities of teachers and then provide them with relevant skills to overcome their real issues. This group also highlighted the importance of PD programmes since these programmes provide them with learning opportunities. This point had not emerged from the interview with the previous group. Perhaps it is because the current group consisted of novice teachers who feel the need of more ideas and skills to improve their practices. Unlike the previous group who were seniors, the emergence of only a few categories from this group may also be because of their less experience and less exposure to PD programs. Similarly, some categories that emerged from the discussion with the previous group belonging to the public sector such as monitoring and follow-up, attitude of trainee teachers and other colleagues, the nomination for teacher education and making teacher education mandatory for teachers did not appear from the discussion with this group. Perhaps it is because these are common problems in the public sector, unlike the private sector. My subsequent interviews will clarify these points.

Appendix I: Purposes of PD Noted by the Respondents

Note: The abbreviations used below (such as, GMT6) should be read in this way. The first letter stands for sector: G for Government and P for Private. The second letter stands for gender: M for Male and F for Female. The next figure stands for the length of experience. The last letter(s) indicate(s) position: T stands for Teacher, SL stands for School Leader, PDP stands for PD Provider and ADEO stands for Assistant District Education Officer.

GM6T

The purpose of PD is developing confidence and making awareness about new methods

GM7T

The purpose of PD is the enhancement of the professional skills and techniques of any individual

GM3T

- Raise the quality of learning and teaching
- Support and inform innovative and reflective practice

GM10T

Understanding and application of new techniques, methods and approaches

GF4T

To make effective the teaching process

GF8T

To make the process of teaching learning effective

GF3T

To overcome weak areas of a professional to make him perfect

GF9T

To make teaching fruitful and effective

PF3T

To strengthen educator's performance level and to raise students achievement

PF1T

To fulfil collective learning needs of children

PF3T

developing the professional in such a way that he will be aware of his responsibilities and perform them happily without considering them a burden

PF4T

To increase the emotional and spiritual attachment of the personal with the organization

PF5T

For us the purpose of PD are; we learn new ways and use them in classroom so that they have positive impact upon students.

PF8T

To introduce modern teaching strategies to teachers

PM24T

- To bring change in attitude
- To bring creativity in thinking

PM5T

- To enhance the confidence
- To enhance command over the subject

GM4SL

- Committed and expert teacher
- Transmitter of religious and social values

GM33SL

- To enhance the standard of school children
- To prepare them according to the demands of modern age
- To guide students

GM8SL

Gaining knowledge and skills

GM16SL

I believe that the purposes of PD should be focused on the improvement of learners.

GF3SL

Skill development and capacity building of individuals

PF6SL

To make the individual self-sufficient and self-confidence

PM10SL

Purpose of PD is to develop a teacher according to modern teaching method to train a teacher to face challenges of change

PM10SL

- Skill development
- Capacity building
- Developing job knowledge
- Changing the attitude towards the job

PM5PDP

- Enhancing knowledge
- Learning skills
- Enhance effectiveness of teaching learning process

PM17PDP

To get ready to face challenges of modern era

PM7PDP

To better perform my own duties and effectively contribute to the students learning

PM6PDP

- -To enhance knowledge base of professionals according to time and need.
- -To improve skills of the professionals according to time and need.

PM12PDP

- -improving one's practice
- -satisfy the needs of the relevant stakeholders
- -improving self confidence

GF10ADEO

To bring positive changes in work/activities/role & responsibility in order to bring change at large scale.

GF10ADEO

- Enhancing knowledge
- Developing skills
- Change in attitude
- Motivation towards self-development

GM6ADEO

- Improve the standard of teaching learning process.
- Make the teachers and learners comfortable in the process of teaching

GM16SDEO

- Personal development
- Capacity enhancement
- Institutional development

Appendix J: Outcome of PD Noted by the Respondents

Note: The abbreviations such as GM6T should be read same as noted in the appendix above.

GM6T

- New techniques are adopted
- Promotes the confidence of teachers

GM7T

Strengthens performance of an institution

GM11T

Promotes those abilities among children which make them successful citizens

GMT

Outcome of PD are: self awareness, self-learning, motivation commitment, effective teaching strategies, problem solving, effective evaluation.

GM10T

- Effective use and application of resources
- Congenial and conducive environment
- Understanding issues and their solutions

GF4T

Makes teaching learning process effective

GF8T

A teacher becomes able to solve the issues of students, knows their psychology and guides them properly then. Otherwise his development is incomplete.

GF6T

Outcomes of PD include enhancement of skills, knowledge, disposition and organizational growth

GF3T

- The issues of classroom management are resolved
- It becomes easy to teach students having different capacities and intelligences
- First it was useless for me. Now I consider it as a requirement

GF2T

Outcomes of PD include enhancement of skills, knowledge, disposition and organizational growth.

GF9T

Interesting teaching in terms of activity based teaching

PF1T

Increases results for all students

PF3T

- Apply new knowledge
- Raise student achievement

PF1T

- Improved teaching
- Holistic development of students

PF6T

Outcome of PD is that candidates' confidence gets boosted up.

PF3T

A professional will be familiar with his rights and responsibilities. He will be engaged in performing his responsibilities more effectively.

PF4T

The qualified professional will increase the good will of the organization in the eyes of the general competitors.

PF5T

For us the outcome of PD is achieving good results for students

PF8T

To be familiar with new teaching strategies

GM4SL

- Effective and useful citizens
- Patriotism towards his/her country

GM33SL

To develop a mindful generation so that they will be equipped with modern educational principles and become helpful and productive citizens

GM8SL

- Knowledge and skill acquisition
- Confidence in rendering the gob

GM16SL

- The implementation and demonstration of the learned skills in the real and practical field coping with challenges and problems

- Better improved and enhanced learning situation
- Children friendly schools and shining results

GF3SL

- Skill enhancement and capacity building

PM10SL

As a teacher it means to change our traditional method of teaching and to deliver our lesson according to changing methods.

PM17PDP

- To apply sound principles of teaching and learning in practical life
- To use effective techniques which promote learning

PM7PDP

- Enhanced students' learning outcomes
- Achievement of my own career goal

PM6PDP

- Improved knowledge base.
- Skilled professionals.
- Enhanced professionalism (good behavior, improved relations)

PM12PDP

- improved self confidence
- improved practices

GF10ADEO

To create positive/productive and peace-loving generation

GF10ADEO

- A positive change in teaching & learning
- Self-learners

GM6ADEO

- Expert and updated teachers
- Talented and well learned up to date students

GM16ADEO

- Better service delivery
- Better performance of students in exam and in field

Appendix K: National Professional Standards for Teachers

Standard 1:	Subject matter knowledge
Standard 2:	Human growth and development
Standard 3:	Knowledge of Islamic ethical values/social life skills
Standard 4:	Instructional planning and strategies
Standard 5:	Assessment
Standard 6:	Learning environment
Standard 7:	Effective communication and proficient use of information communication technologies
Standard 8:	Collaboration and partnerships
Standard 9:	Continuous professional development and code of conduct
Standard 10:	Teaching of English as second/foreign language (ESL/EFL)

References

- Admiraal, W., Kruiter, J., Lockhorst, D., Schenke, W., Sligte, H., Smit, B., . . . de Wit, W. (2016). Affordances of teacher professional learning in secondary schools. *Studies in continuing education*, *38*(3), 281-298.
- Adoniou, M. (2013). Preparing Teachers The Importance of Connecting Contexts in Teacher Education. *Australian Journal of Teacher Education*, *38*(8), 47-60. doi:10.14221/ajte.2013v38n8.7
- Alderman, H., Orazem, P. F., & Paterno, E. M. (2001). School quality, school cost, and the public/private school choices of low-income households in Pakistan. *Journal of Human Resources*, *36*, 304-326.
- Ali, T. (2011). Understanding how Practices of Teacher Education in Pakistan Compare with the Popular Theories and Narrative of Reforms of Teacher Education in International Context. *International Journal of Humanities and Social Science*, *1*(8), 208-222.
- Ali, T. (2014). Development of teacher leadership: a multi-faceted approach to bringing about improvements in rural elementary schools in Pakistan. *Professional Development in Education*, 40(3), 352-375.
- Alibakhshi, G., & Dehvari, N. (2015). EFL Teachers' Perceptions of Continuing Professional Development: A Case of Iranian High School Teachers. *PROFILE Issues in Teachers' Professional Development*, 17(2), 29-42. doi:10.15446/profile.v17n2.44374
- Andrabi, T., Das, J., & Khwaja, A. I. (2008). A dime a day: The possibilities and limits of private schooling in Pakistan. *Comparative Education Review*, *52*(3), 329-355.
- Andrews, T. (2012). What is social constructionism. Grounded theory review, 11(1), 39-46.
- Annells, M. (1996). Grounded Theory Method: Philosophical Perspectives, Paradigm of Inquiry, and Postmodernism. *Qualitative Health Research, 6*(3), 379-393. doi:10.1177/104973239600600306
- Anson, R. J. (1994). Systemic Reform: Perspectives on Personalizing Education. Retrieved 15/06/2016, from Office of Educational Research and Improvement, Washington, DC. http://files.eric.ed.gov/fulltext/ED376557.pdf
- Antoniou, P., Kyriakides, L., & Creemers, B. P. M. (2015). The Dynamic Integrated Approach to teacher professional development: rationale and main characteristics. *Teacher Development*, 19(4), 535-552. doi:10.1080/13664530.2015.1079550
- Atkins, L., & Wallace, S. (2012). Qualitative research in education. UK: SAGE publications.
- Aubusson, P., & Schuck, S. (2013). Teacher education futures: today's trends, tomorrow's expectations. *Teacher Development, 17*(3), 322-333. doi:10.1080/13664530.2013.813768
- Avalos, B. (2011). Teacher professional development in Teaching and Teacher Education over ten years. *Teaching and Teacher Education*, 27(1), 10-20. doi:10.1016/j.tate.2010.08.007
- Ball, D. L. (1995). Developing Mathematics Reform: What Don't We Know about Teacher Learning--But Would Make Good Working Hypotheses? Paper prepared for conference on Teacher Enhancement in Mathematics K 6 Arlington, Virginia November 18 20, 1994. Retrieved 22/05/2015 http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.560.2944&rep=rep1&type=pdf
- Ball, D. L., & Cohen, D. K. (1999). Developing practice, developing practitioners: Toward a practice-based theory of professional education. *Teaching as the learning profession: Handbook of policy and practice*, *1*, 3-22.

- Banks, F., Leach, J., & Moon, B. (2005). Extract from new understandings of teachers' pedagogic knowledge 1. *Curriculum Journal*, 16(3), 331-340. doi:10.1080/09585170500256446
- Barber, S. M. (2010). Education reform in Pakistan: This time it's going to be different. Retrieved 15/03/2015, from Pakistan Education Task Force http://itacec.org/document/Michael%20Barbers%20Paper%202010%20PTEF%20Main%20piece.pdf
- Bashiruddin, A., & Qayyum, R. (2014). Teachers of English in Pakistan: Profile and recommendations. *NUML Journal of Critical Inquiry*, 12(1), 1-19.
- Basic Education and Policy Support. (2002). *Bangladesh Education Sector Review. Report No.*4. Retrieved from http://www.beps.net/publications/bangladesh%204-%20teacher%20training.pdf
- Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational dynamics*, *18*(3), 19-31.
- Bayar, A. (2014). The Components of Effective Professional Development Activities in terms of Teachers' Perspective. *International Online Journal of Educational Sciences, 6*(2), 319-327. doi:10.15345/iojes.2014.02.006
- Behlol, M. G., Dad, H., & Raja, S. A. (2014). Educational Policies Syndrome: Teacher Education Programmes and Teacher Recruitment Practices in Pakistan. *Journal of Research in Social Sciences*, 1(1), 52.
- Bennell, P. (2004). Teacher motivation and incentives in sub-Saharan Africa and Asia. Retrieved 10/05/2016 https://pdfs.semanticscholar.org/0009/cc7e647c18899afbbf6b19a3362591fd8b32.pdf
- Bereiter, C., & Scardamalia, M. (2014). Knowledge building and knowledge creation: One concept, two hills to climb. In S. C. Tan, H. J. So, & J. Yeo (Eds.), *Knowledge creation in education* (pp. 35-52). Singapore: Springer.
- Birks, M., & Bills, J. (2011). Grounded theory: A practical guide. Los Angeles: SAGE.
- Birman, B. F., Desimone, L., Poter, A. C., & Garet, M. S. (2000). Designing professional development that works. *Educational Leadership*, *57*(8), 28-33.
- Bissaker, K. (2009). The processes and outcomes of professional learning in an innovative school: The construction of an explanatory model. Unpublished thesis, submitted to Flinders University, School of Education.
- Bissaker, K. (2014). Transforming STEM Education in an Innovative Australian School: The Role of Teachers' and Academics' Professional Partnerships. *Theory Into Practice*, *53*(1), 55-63. doi:10.1080/00405841.2014.862124
- Blackler, F. (1995). Knowledge, knowledge work and organizations: An overview and interpretation. *Organization studies*, *16*(6), 1021-1046.
- Blanche, T. M., & Durrheim, K. (1999). Histories of the present: Social science research in context. Research in practice: Applied methods for the social sciences, 2, 1-17.
- Bloor, M. (2001). Focus groups in social research. UK: Sage.
- Bogdan, R. C., & Biklen, S. K. (1998). Foundations of qualitative research in education: An introduction to theory and methods. London: Allyn and Bacon.
- Boylan, M., Coldwell, M., Maxwell, B., & Jordan, J. (2017). Rethinking models of professional learning as tools: a conceptual analysis to inform research and practice. *Professional Development in Education*, 1-20.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (1999). *How people learn: Brain, mind, experience and School*. Washington: National Academy Press.

- Bransford, J. D., Darling-Hammond, L., & LePage, P. (2005). Introduction. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 1-39). San Francisco: Jossey-Bass.
- Brown, C., & Militello, M. (2016). Principal's perceptions of effective professional development in schools. *Journal of Educational Administration*, *54*(6), 703-726.
- Brown, K. (2006). Leadership for Social Justice and Equity: Evaluating a Transformative Framework and Andragogy. *Educational Administration Quarterly, 42*(5), 700-745. doi:10.1177/0013161x06290650
- Brown, S., & Duguid, P. (1991). Organizational learning and communities-of-practice: Toward a unified view of working, learning, and innovation. *Organization science*, *2*(1), 40-57.
- Buczynski, S., & Hansen, C. B. (2010). Impact of professional development on teacher practice: Uncovering connections. *Teaching and Teacher Education, 26*(3), 599-607. doi:10.1016/j.tate.2009.09.006
- Cameron, S., Mulholland, J., & Branson, C. (2013). Professional learning in the lives of teachers: towards a new framework for conceptualising teacher learning. *Asia-Pacific Journal of Teacher Education*, *41*(4), 377-397. doi:10.1080/1359866x.2013.838620
- Charmaz, K. (2000). Grounded theory: Objectivist and constructivist methods. InN. K. Denzin & YS Lincoln (Eds.), Handbook of qualitative research (pp. 509-535): Thousand Oaks, CA: Sage.
- Charmaz, K. (2006). Constructing grounded theory: A practical guide through qualitative research. CA: SagePublications Ltd.
- Charmaz, K. (2008). Constructionism and the grounded theory. In J. A. Holstein & J. F. Gubrium (Eds.), *Handbook of constructionist research* (pp. 397-412). New York: The Guilford Press.
- Charmaz, K. (2014). Grounded Theory in Global Perspective. Qualitative Inquiry, 20(9), 1074-1084. doi:10.1177/1077800414545235
- Cheema, A. R. (2017, January 15). Education: What's holding back rural Pakistan from achieving education for all? *Dawn Newspaper*. Retrieved from https://www.dawn.com/news/1308070
- Cheng, E. W. L. (2015). Maintaining the transfer of in-service teachers' training in the workplace. *Educational Psychology, 36*(3), 444-460. doi:10.1080/01443410.2015.1011608
- Christensen, C. M., Johnson, C. W., & Horn, M. B. (2008). *Disrupting class*: McGraw-Hill Professional Publishing.
- Clarke, A. (2006). Qualitative interviewing: Encountering ethical issues and challenges. *Nurse Researcher*, *13*(4), 19-29.
- Clarke, D., & Hollingsworth, H. (2002). Elaborating a model of teacher professional growth. . *Teaching and Teacher Education, 18*, 947-967.
- Cole, P. (2005). Leadership and professional learning: Forty actions leaders can take to improve professional learning. (1920963235). Retrieved 16/04/2016, from IARTV http://www.ptrconsulting.com.au/sites/default/files/Peter_Cole-Leadership_and_Professional_Learning.pdf
- Cole, P. (2012). Linking effective professional learning with effective teaching practice.

 Australian Institute for Teaching and School Leadership, Melbourne. Retrieved 23/07/2015

 http://www.ptrconsulting.com.au/sites/default/files/linking_effective_professional_learning_with_effective_teaching_practice_cole.pdf
- Connole, H. (1993). The research enterprise. *Issues and methods in research: Study guide*, 7-27.

- Cook, S. D., & Yanow, D. (1993). Culture and organizational learning. *Journal of management inquiry*, *2*(4), 373-390.
- Cordingley, P., Bell, M., Isham, C., Evans, D., & Firth, A. (2007). What do specialists do in CPD programmes for which there is evidence of positive outcomes for pupils and teachers. Retrieved 09/11/2016 https://eppi.ioe.ac.uk/cms/Default.aspx?tabid=2275
- Cronin, A. (2008). Focus groups. Researching social life, 3, 226-244.
- Cronin, C. (2014). Using case study research as a rigorous form of inquiry. *Nurse Researcher*, 21(5), 19-27.
- Cross, J. (2011). *Informal learning: Rediscovering the natural pathways that inspire innovation and performance.* New Jersey: John Wiley & Sons.
- Dadds, M. (2014). Continuing Professional Development: nurturing the expert within. *Professional Development in Education, 40*(1), 9-16. doi:10.1080/19415257.2013.871107
- Darling-Hammond, L. (2000). How teacher education matters. *Journal of Teacher Education*, 51(3), 166-173.
- Darling-Hammond, L. (2004). Standards, accountability, and school reform. *Teachers College Record*, *106*(6), 1047-1085.
- Darling-Hammond, L. (2015). Want to Close the Achievement Gap? Close the Teaching Gap. *American Educator*, 38(4), 14-18.
- Darling-Hammond, L. (2017). Teacher education around the world: What can we learn from international practice? *European Journal of Teacher Education*, 1-19.
- Darling-Hammond, L., & Bransford, J. (2007). *Preparing teachers for a changing world: What teachers should learn and be able to do.* New Jersey: John Wiley & Sons.
- Darling-Hammond, L., Hammerness, K., Grossman, P., Rust, F., & Shulman, L. (2005). The design of teacher education programs. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 390-441). San Francisco Jossey-Bass.
- Darling-Hammond, L., Holtzman, D. J., Gatlin, S. J., & Heilig, J. V. (2005). Does teacher preparation matter? Evidence about teacher certification, Teach for America, and teacher effectiveness. *Education Policy Analysis Archives*, *13*(42), n42.
- Darling-Hammond, L., & McLaughlin, M. W. (2011). Policies That Support Professional development in an Era of Reform. *Kappan, 92*(6), 81-92.
- Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009).

 Professional learning in the learning profession: A status report on teacher development in the United States and abroad. Published by the National Staff Development Council and The School Redesign Network at Stanford University as part of their multi-year study, The Status of Professional Development in the United States. Retrieved from https://edpolicy.stanford.edu/publications/pubs/187
- Dawn. (2010, October 11). 18th amendment and education. *Daily Dawn Newspaper, Pakistan*. Retrieved from https://www.dawn.com/news/570524
- Dawn. (2017, April 28). Pakistan's education spending lowest in South Asia. *Daily Dawn Newspaper, Pakistan*. Retrieved from https://www.dawn.com/news/1254909
- Day, C. (1999). *Developing Teachers: The Challenges of Lifelong Learning*. London: Falmer Press.
- de Vries, S., van de Grift, W. J., & Jansen, E. P. (2014). How teachers' beliefs about learning and teaching relate to their continuing professional development. *Teachers and Teaching*, *20*(3), 338-357.

- Denzin, N. K., & Lincoln, Y. S. (2000). The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research (second edition)* (pp. 1-28). New Delhi: Sage Publications.
- Desimone, L. M. (2009). Improving Impact Studies of Teachers' Professional Development: Toward Better Conceptualizations and Measures. *Educational Researcher*, *38*(3), 181-199. doi:10.3102/0013189x08331140
- Desimone, L. M. (2011). A Primer on Effective Professional Development. *Phi Delta Kappan*, 92, 68-71.
- Desimone, L. M., Porter, A. C., Garet, M. S., Yoon, K. S., & Birman, B. F. (2002). Effects of Professional Development on Teachers' Instruction: Results from a Three-year Longitudinal Study. *Educational Evaluation and Policy Analysis*, 24(2), 81-112.
- Dimmock, C. (2014). Conceptualising the research–practice–professional development nexus: mobilising schools as 'research-engaged' professional learning communities. *Professional Development in Education, 42*(1), 36-53. doi:10.1080/19415257.2014.963884
- Dinham, S. (2007). How schools get moving and keep improving: Leadership for teacher learning, student success and school renewal. *Australian Journal of Teacher Education*, 51(3), 263-275.
- Doolittle, G., Sudeck, M., & Rattigan, P. (2008). Creating professional learning communities: The work of professional development schools. *Theory Into Practice, 47*(4), 303-310.
- Dwyer, C., & Buckle, J. (2009). The space between: On being an insider-outsider in qualitative research. *International Journal of Qualitative Methods*, 8(1), 54-63.
- Easton, L. (2008). Powerful designs for professional development. 2nd Edition. Oxford, OH: NSDC. (Second ed.). Oxford: NSDC.
- Education Management Information System. (2015-16). Annual Statistical Report of Government Schools. Elementary & Secondary Education Department Government of Khyber Pakhtunkhwa, Pakistan. Retrieved from http://www.kpese.gov.pk/Downloads/ASC/ASC%202015-16.pdf
- Eisner, E. W. (1991). The enlightened eye: Qualitative inquiry and the enhancement of educational practice. New York: Macmillan Publishing Company.
- Elkjaer, B. (1999). In search of a social learning theory. *Organizational learning and the learning organization: Developments in theory and practice*, 75-91.
- Engestrom, Y. (1999). Innovative learning in work teams: Analyzing cycles of knowledge creation in practice. *Perspectives on activity theory*, 377-404.
- Engeström, Y. (2001). Expansive learning at work: Toward an activity theoretical reconceptualization. *Journal of education and work, 14*(1), 133-156.
- Engward, H., & Davis, G. (2015). Being reflexive in qualitative grounded theory: discussion and application of a model of reflexivity. *J Adv Nurs*, 71(7), 1530-1538. doi:10.1111/jan.12653
- Eraut, M. (2007). Learning from other people in the workplace. *Oxford review of education,* 33(4), 403-422.
- Evans, L. (2014). Leadership for professional development and learning: enhancing our understanding of how teachers develop. *Cambridge Journal of Education, 44*(2), 179-198.
- Evers, A. T., Van der Heijden, B. I. J. M., & Kreijns, K. (2016). Organisational and task factors influencing teachers' professional development at work. *European Journal of Training and Development*, 40(1), 36-55. doi:10.1108/eitd-03-2015-0023
- Ezzy, D. (2002). Qualitative analysis: Practice and innovation. London: Routledge.

- Fenwick, T., & Tennant, M. (2004). Understanding adult learners. *Dimensions of adult learning: Adult education and training in a global era*, 55-73.
- Fields, B. A. (1990). Minimal Intervention In-service Training for Teachers: an experimental study in primary classrooms. *South Pacific Journal of Teacher Education, 18*(1), 41-50.
- Flores, M. A. (2005). Teachers' views on recent curriculum changes: Tensions and challenges. *Curriculum Journal*, *16*(3), 401-413.
- Fontana, A., & Frey, J. H. (2000). The interview: From structured questions to negotiated text. *Handbook of qualitative research, 2*(6), 645-672.
- Fraenkel, J. R., & Wallen, N. E. (2003). *How to design and evaluate research in education*. New York: McGraw-Hill Higher Education.
- Fraenkel, J. R., & Wallen, N. E. (2009). *The nature of qualitative research* (7th ed.). Boston: McGraw-Hill.
- Fullan, M. (1993). Why teachers must become change agents. *Educational Leadership, 50*, 12-12.
- Fullan, M. (2002). The role of leadership in the promotion of knowledge management in schools. *Teachers and Teaching, 8*(3), 409-419.
- Fullan, M. (2007). The new meaning of educational change. New York: Routledge.
- Fullan, M. (2014). Leading in a culture of change personal action guide and workbook. John Wiley & Sons.
- Fullan, M., & Hargreaves, A. (1993). Teacher development and educational change.
- Gale, T. (1998). Methodological'maps' and key assumptions: A framework for understanding research. *Postgraduate Research Weekend, Graduate School of Education, Faculty of Education and Creative Arts, Central Queensland University*, 16-17.
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What Makes Professional Development Effective? Results From a National Sample of Teachers. *American Educational Research Journal*, 38(4), 915-945. doi:10.3102/00028312038004915
- Gatlin, D. (2009). A Pluralistic Approach to the Revitalization of Teacher Education. *Journal of Teacher Education*, 60(5), 469-477. doi:10.1177/0022487109348597
- Givvin, K. B., & Santagata, R. (2011). Toward a common language for discussing the features of effective professional development: the case of a US mathematics program. *Professional Development in Education*, *37*(3), 439-451. doi:10.1080/19415257.2010.527711
- Glaser, B., & Strauss, A. (1967). Grounded theory: The discovery of grounded theory. *Sociology The Journal Of The British Sociological Association*, 12, 27-49.
- Glesne, C. (2006). *Becoming qualitative researchers: An introduction* (3rd ed. Vol. 3). London: Pearson.
- Gonczi, A. (2004). The new professional and vocational education. In G. Foley (Ed.), Dimensions of adult learning: Adult education and training in a global era (pp. 19-34). Maidenhead: Open University Press.
- Good, T. L. (2014). What do we know about teachers influence on student standardized tests:

 Any why do we know so little about other student outcomes? *Teachers College Record: The Voice of Scholarship in Education., 116*(1), 1-41.
- Grimmett, P. P., & Crehan, E. P. (1992). The nature of collegiality in teacher development: The case of clinical supervision. *Teacher development and educational change, 12*(2), 56-85.
- Grossman, P., Hammerness, K., & McDonald, M. (2009). Redefining teaching, re-imagining teacher education. *Teachers and Teaching*, *15*(2), 273-289. doi:10.1080/13540600902875340

- Guillemin, M., & Gillam, L. (2004). Ethics, reflexivity, and "ethically important moments" in research. *Qualitative Inquiry*, *10*(2), 261-280.
- Gulamhussein, A. (2013). Teaching the teachers: Effective professional development in an era of high stakes accountability. Retrieved 22/03/2016

 http://www.centerforpubliceducation.org/Main-Menu/Staffingstudents/Teaching-the-Teachers-Effective-Professional-Development-in-an-Era-of-High-Stakes-Accountability/Teaching-the-Teachers-Full-Report.pdf
- Guskey, T. R. (2000). Evaluating professional development. California: Corwin Press.
- Guskey, T. R. (2002). Evaluating professional development. Retrieved from http://rt3region7.ncdpi.wikispaces.net/file/view/Eval%20PD%20Article-Guskey.pdf, website:
- Guskey, T. R. (2003a). Analyzing Lists of the Characteristics of Effective Professional Development to Promote Visionary Leadership. *NASSP Bulletin*, *87*(637), 4-20. doi:10.1177/019263650308763702
- Guskey, T. R. (2003b). What Makes Professional Development Effective? *Phi Delta Kappan,* 84(10), 748-750. doi:10.1177/003172170308401007
- Guskey, T. R. (2009). Closing the knowledge gap on effective professional development. *Educational Horizons (Annual)*, 224-233.
- Guskey, T. R., & Yoon, K. S. (2009). What works in professional development? *Phi Delta Kappan*, *90*(7), 495-500.
- Guthrie, G. (2014). Culturally grounded pedagogy and research methodology. *Compare: A Journal of Comparative and International Education, 45*(1), 163-168. doi:10.1080/03057925.2014.981440
- Hallinger, P., & Leithwood, K. (1998). Unseen forces: The impact of social culture on school leadership. *Peabody Journal of Education*, *73*(2), 126-151.
- Hammerness, K., Darling-Hammond, L., & Bransford, J. (2005). How teachers learn and develop. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: what teachers should learn and be able to do* (pp. 258-289). San Francisco: Jossey-Bass.
- Hancock, B., Okleford, E., & Windridge, K. (2007). *An introduction to qualitative research*: The NIHR RDS EM / YH.
- Haq, R. (2017, May 26). Literacy rate in Pakistan slips by 2%. *The Express Tribune*. Retrieved from https://tribune.com.pk/story/1419396/economic-survey-literacy-rate-pakistan-slips-2/
- Hargreaves, A. (2000). Four ages of professionalism and professional learning. *Teachers and teaching: theory and practice, 6*(2), 151-182.
- Hargreaves, A. (2002). *Teaching in the Knowledge Society.* Paper presented at the Technology Colleges Trust Vision 2010 Second International Online Conference, 13-26 October.
- Hargreaves, A., & Fullan, M. (2012). *Professional capital: Transforming teaching in every school*: Teachers College Press.
- Hargreaves, D. (1999). The knowledge-creating school. *British journal of educational studies,* 47(2), 122-144.
- Harland, J., & Kinder, K. (2014). Teachers' Continuing Professional Development: framing a model of outcomes. *Professional Development in Education, 40*(4), 669-682. doi:10.1080/19415257.2014.952094
- Hatala, J.-P., & Fleming, P. R. (2007). Making transfer climate visible: Utilizing social network analysis to facilitate the transfer of training. *Human Resource Development Review*, *6*(1), 33-63.

- Hattie, J. (2008). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. New York: Routledge.
- Hawley, W. D., & Valli, L. (1999). The essentials of effective professional development: A new consensus. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 127-150). San Fransisco: Jossey-Bass.
- Hawley, W. D., & Valli, L. (2000). Learner-Centered Professional Development. *Research Bulletin*, 27, 1-7.
- Hill, H. C., Beisiegel, M., & Jacob, R. (2013). Professional Development Research: Consensus, Crossroads, and Challenges. *Educational Researcher*, *42*(9), 476-487. doi:10.3102/0013189x13512674
- Hilton, G., Flores, M., & Niklasson, L. (2013). Teacher quality, professionalism and professional development: findings from a European project. *Teacher Development*, *17*(4), 431-447. doi:10.1080/13664530.2013.800743
- Hitchcock, G., & Hughes, D. (1995). Research and the teacher: A qualitative introduction to school-based research. London: Psychology Press.
- Hoban, F. (2002). *Teacher learning for educational change: A system thinking approach*. England: Open University Press.
- Hodder, I. (1994). The interpretation of documents and material culture. Retrieved 5/5/2016 https://is.muni.cz/el/1423/jaro2013/SAN105/um/Hodder_The_Interpretation_of_Documents_and_Material_Culture.pdf
- Hodkinson, P. (2008). Grounded theory and inductive research. *Researching social life*, 3, 81-100.
- Hofstede, G. (1991). Organizations and cultures: Software of the mind. New York: McGrawHill.
- Hollingsworth, H. (1999). Teacher professional growth: A study of primary teachers involved in mathematics professional development. Retrieved 16/03/2016 http://dro.deakin.edu.au/view/DU:30023471
- Holloway, J. H. (2000). The promise and pitfalls of site-based management. *Educational Leadership*, *57*(7), 81-82.
- Howe, K., & Eisenhart, M. (1990). Standards for qualitative (and quantitative) research: A prolegomenon. *Educational Researcher*, *19*(4), 2-9.
- Huberman, A. M., & Miles, M. B. (2013). *Innovation up close: How school improvement works*: Springer Science & Business Media.
- Hunzai, Z. N. (2009). Teacher Education in Pakistan: Analysis of Planning Issues in Early Childhood Education. *Journal of Early Childhood Teacher Education*, *30*(3), 285-297. doi:10.1080/10901020903084421
- Hunzicker, J. (2011). Effective professional development for teachers: a checklist. *Professional Development in Education*, *37*(2), 177-179. doi:10.1080/19415257.2010.523955
- Hussain, R., & Ali, S. (2010). Improving public school teachers in Pakistan: challenges and opportunities. *Improving Schools*, *13*(1), 70-80. doi:10.1177/1365480209352404
- Ingvarson, L., Meiers, M., & Beavis. (2003). Evaluating the quality and impact of professional development programs. Retrieved from http://research.acer.edu.au/professional_dev/3 website:
- Ingvarson, L., Meiers, M., & Beavis, A. (2005). Factors affecting the impact of professional development programs on teachers' knowledge, practice, student outcomes & efficacy. *Education Policy Analysis Archives*, *13*(10).
- James, M., & McCormick, R. (2009). Teachers learning how to learn. *Teaching and Teacher Education*, 25(7), 973-982. doi:10.1016/j.tate.2009.02.023

- Joyce, B., & Showers, B. (1980). Improving inservice training: The messages of research. *Educational Leadership*, *37*(5), 379-385.
- Kanu, Y. (2005). Tensions and dilemmas of cross-cultural transfer of knowledge: post-structural/postcolonial reflections on an innovative teacher education in Pakistan. *International Journal of Educational Development, 25*(5), 493-513. doi:10.1016/j.ijedudev.2005.01.002
- Kean, T. (2011). The 9/11 commission report: Final report of the national commission on terrorist attacks upon the United States. (0160891809). Retrieved 25/03/2017, from Government Printing Office https://www.9-11commission.gov/report/911Report.pdf
- Kennedy, A. (2014a). Models of Continuing Professional Development: a framework for analysis. *Professional Development in Education, 40*(3), 336-351. doi:10.1080/19415257.2014.929293
- Kennedy, A. (2014b). Understanding continuing professional development: the need for theory to impact on policy and practice. *Professional Development in Education, 40*(5), 688-697. doi:10.1080/19415257.2014.955122
- Kennedy, A. (2017). International conversations on professional learning. *Professional Development in Education*, *43*(5), 689-691.
- Kennedy, M. (1998). Form and Substance in In-service Teacher Education Retrieved from http://archive.wceruw.org/nise/Publications/Research_Monographs/vol13.pdf website:
- Kennedy, M. (2016). How does professional development improve teaching? *Review of Educational Research*, *86*(4), 945-980.
- Khan, M. (2015). Building Capacity or Provoking Fear: Early Childhood Teachers' Appraisal for Professional Development. *Pakistan Journal of Psychological Research*, 30(2), 189-205.
- Khan, S. C. (2004). From practice to policy: Making a difference. The Teachers' Resource Centre, Working with the Government of Pakistan in Early Childhood Education. Funded by the Aga Khan Foundation. Retrieved from http://www.tf.edu.pk/docs/downloads/Teachers Resource Centre.pdf
- Killion, J., & Roy, P. (2009). *Becoming a learning school*: National Staff Development Council Oxford, OH.
- King, F. (2014). Evaluating the impact of teacher professional development: an evidence-based framework. *Professional Development in Education, 40*(1), 89-111. doi:10.1080/19415257.2013.823099
- Knight, J. (2009). What Can We Do about Teacher Resistance? *Phi Delta Kappan*, *90*(7), 508-515.
- Knowles, M. (1973). The adult leaner: A neglected species. Retrieved from http://files.eric.ed.gov/fulltext/ED084368.pdf website:
- Kooy, M., & van Veen, K. (Eds.). (2012). *Teacher learning that matters: International perspectives*. New York: Routledge.
- Krefting, L. (1991). Rigor in Qualitative Research: The Assessment of Trustworthiness. *The American Journal of Occupational Therapy, 45*(3), 214.
- Labone, E., & Long, J. (2014). Features of effective professional learning: a case study of the implementation of a system-based professional learning model. *Professional Development in Education*, *42*(1), 54-77. doi:10.1080/19415257.2014.948689
- Lalitha, H. D. A. (2005). Development of a model for the continuing professional development of teachers: A qualitative investigation. (PhD), University of Wollongong.
- Lamb, M. (1995). The consequences of INSET. ELT journal, 49(1), 72-80.

- Lange, S. (2014). Learner orientation through professional development of teachers? Empirical results from cascade training in Anglophone Cameroon. *Compare: A Journal of Comparative and International Education, 44*(4), 587-612.
- Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. UK: Cambridge university press.
- Leach, D. J., & Conto, H. (1999). The additional effects of process and outcome feedback following brief in-service teacher training. *Educational Psychology*, *19*(4), 441-462.
- Leach, L. (2000). Self-directed learning: Theory and practice. (PhD), University of Technology, Sydney.
- Leithwood, K., Leonard, L., & Sharratt, L. (1998). Conditions fostering organizational learning in schools. *Educational Administration Quarterly*, *34*(2), 243-276.
- Leithwood, K., & Riehl, C. (2003). What we know about successful school leadership. Philadelphia: Temple University.
- Lewin, K. M., & Stuart, J. M. (2003). Insights into the Policy and Practice of Teacher Education in Low-income Countries: the Multi-Site Teacher Education Research Project. *British Educational Research Journal*, *29*(5), 691-707.
- Lieberman, A., & McLaughlin, M. (2000). Professional development in the United States: Policies and practices. *Prospects*, 30(2), 225-236.
- Lincoln, Y. S., & Guba, E. A. (1895). NaturalistiC inqUiry. Beverly Hills, CA: Sage.
- Lincoln, Y. S., & Guba, E. G. (2000). Paradigmatic controversies, contradictions, and emerging confluences In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research (second edition)* (pp. 163-188). New Delhi: Sage Publications.
- Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited. *The Sage handbook of qualitative research, 4*, 97-128.
- Lindstrom, P. H., & Speck, M. (2004). *The principal as professional development leader*. California: Corwin Press.
- Lister, S., Bano, M., Carr-Hill, R., & MacAuslan, I. (2010). *Mid-Term Evaluation of the EFA Fast Track Initiative, Country Case Study: Pakistan* Retrieved from http://www.globalpartnership.org/media/Pakistan-study.pdf
- Little, J. W. (1993). Teachers' professional development in a climate of educational reform. *Educational Evaluation and Policy Analysis*, *15*(2), 129-151.
- Lohman, M. C. (2000). Environmental inhibitors to informal learning in the workplace: A case study of public school teachers. *Adult Education Quarterly*, *50*(2), 83-101.
- Louis, K. S., & Miles, M. B. (1991). Improving the urban high school: What works and why. *NASSP Bulletin*, *75*(534), 117-119.
- Lustick, D. S. (2011). Experienced secondary science teachers' perceptions of effective professional development while pursuing National Board certification. *Teacher Development*, *15*(2), 219-239. doi:10.1080/13664530.2011.571511
- Marshall, C., & Rossman, G. B. (2014). Designing qualitative research: Sage publications.
- Mason, J. (2002). Qualitative researching. California: Sage.
- Mayer, D., Mitchell, J., Macdonald, D., & Bell, R. (2005). Professional standards for teachers: a case study of rofessional learning. *Asia-Pacific Journal of Teacher Education*, 33(2), 159-179. doi:10.1080/13598660500121977
- Mbiti, I. M. (2016). The Need for Accountability in Education in Developing Countries. *Journal of Economic Perspectives*, 30(3), 109-132. doi:10.1257/jep.30.3.109

- McClure, K. R. (2009). Madrasas and Pakistan's education agenda: Western media misrepresentation and policy recommendations. *International Journal of Educational Development*, 29(4), 334-341.
- McDermid, F., Peters, K., Jackson, D., & Daly, J. (2014). Conducting qualitative research in the context of pre-existing peer and collegial relationships. *Nurse Researcher*, *21*(5), 28-33.
- McIlfatrick, S., Sullivan, K., & McKenna, H. (2006). Exploring the ethical issues of the research interview in the cancer context. *Eur J Oncol Nurs*, *10*(1), 39-47. doi:10.1016/j.ejon.2005.04.002
- McLaughlin, D. (1996). Who is to retrain the teacher trainers?: A Papua New Guinea case study. . *Teaching and Teacher Education*, *12*(3), 285-301.
- McMillan, D. J., McConnell, B., & O'Sullivan, H. (2016). Continuing professional development—why bother? Perceptions and motivations of teachers in Ireland. *Professional Development in Education*, 42(1), 150-167.
- Meirink, J. A., Meijer, P. C., Verloop, N., & Bergen, T. C. (2009). How do teachers learn in the workplace? An examination of teacher learning activities. *European Journal of Teacher Education*, 32(3), 209-224.
- Memon, G. R. (2007). Education in Pakistan: The key issues, problems and the new challenges. *Journal of Management and Social Sciences*, *3*(1), 47-55.
- Memon, M., Ali, R. N., Simkins, T., & Garret, V. (2000). Understanding the headteachers' role in Pakistan: emerging role demands, constraints and choices. *International Studies in Educational Administration Journal*, 28(2), 48-56.
- Mercer, J. (2007). The challenges of insider research in educational institutions: wielding a double-edged sword and resolving delicate dilemmas. *Oxford review of education, 33*(1), 1-17.
- Mezirow, J. (1997). Transformative learning: Theory to practice. *New Directions for Adult and Continuing Education, 5*, 5-12.
- Mezirow, J. (2009). Transformative learning theory. In J. Mezirow & E. W. Taylor (Eds.), *Transformative learning in practice: Insights from community, workplace, and higher education* (pp. 18-31). San Francisco: Jossy-Bass.
- Mills, J., Bonner, A., & Francis, K. (2006). The development of constructivist grounded theory. *International Journal of Qualitative Methods*, *5*(1), 25-35.
- Ministry of Education. (2009a). National Education Policy. Government of Pakistan. Islamabad.
- Ministry of Education. (2009b). *National Professional Standards for Teachers of Pakistan. Policy and Planning Wing, Government of Pakistan.* Islamabad.
- Ministry of Education. (2014). Education for All 2015 National Review. Trainings and Standards in Higher Education Academy of Educational Planning and Management Islamabad, Pakistan. Retrieved from http://www.moent.gov.pk/pubDetails.aspx
- Mohammed, R. F. (2004). Practical Constraints upon Teacher Development in Pakistani Schools. *Journal of In-Service Education*, *30*(1), 101-114.
- Mohammed, R. F. (2006). What hinders change in classroom practice? Lessons from the field and future directions in Pakistan. *Journal of In-Service Education*, *32*(3), 375-385. doi:10.1080/13674580600842016
- Mohammed, R. F., & Harlech-Jones, B. (2008). The fault is in ourselves: looking at 'failures in implementation'. *Compare: A Journal of Comparative and International Education, 38*(1), 39-51. doi:10.1080/03057920701420825
- Nabhani, M., Nicolas, M. O. D., & Bahous, R. (2013). Principals' views on teachers' professional development. *Professional Development in Education, 40*(2), 228-242. doi:10.1080/19415257.2013.803999

- National Education Management Information System. (2017). *Pakistan Education Statistics* 2015-2016. Retrieved from http://www.aepam.edu.pk/Index.asp?PageId=27
- Nawab, A. (2011). Workplace learning in Pakistani schools: a myth or reality? *Journal of Workplace Learning*, 23(7), 421-434.
- Nawab, A. (2012). Is it the way to teach language the way we teach language? English language teaching in rural Pakistan. *Academic Research International*, 2(2), 696-705.
- Nawab, A. (2014). The patterns of organizational learning in a private secondary school in rural Pakistan. *Asian Education and Development Studies*, *3*(2), 135-149.
- Nawab, A. (2017). What difference could in-service training make? Insights from a public school of Pakistan. *Teacher Development*, *21*(1), 142-159.
- Nemeržitski, S., Loogma, K., Heinla, E., & Eisenschmidt, E. (2013). Constructing model of teachers' innovative behaviour in school environment. *Teachers and Teaching, 19*(4), 398-418.
- Nesbit, T., Leach, L., & Foley, G. (2004). Teaching adults. *Dimensions of adult learning: Adult education and training in a global era*, 74-95.
- Netolicky, D. M. (2016). Rethinking professional learning for teachers and school leaders. Journal of Professional Capital and Community, 1(4), 270-285. doi:10.1108/jpcc-04-2016-0012
- Newman, I., Newman, D., & Newman, C. (2011). Writing Research Articles Using Mixed Methods: Methodological Considerations to Help You Get Published. In T. Rocco & T. Hatcher (Eds.), *The handbook of scholarly writing and publishing* (pp. 191-208). San Francisco: Jossey-Bass.
- Newmann, F. M., King, M. B., & Youngs, P. (2000). Professional Development That Addresses School Capacity: Lessons from Urban Elementary Schools. . *American Journal of Education*, 108(4), 259-299.
- Neyland, M. (1992). Educational computing research: A non-universal methodolgoy. Paper presented at the The annual joint conference of the Australian Association for Research in Education and the New Zealand Association for Research in Education. Retrieved from. https://www.aare.edu.au/data/publications/1992/neylm92269.pdf
- Nguyen, P. M., Elliott, J. G., Terlouw, C., & Pilot, A. (2009). Neocolonialism in education: Cooperative learning in an Asian context. *Comparative education, 45*(1), 109-130.
- Nicolaidis, K., & Mattheoudakis, M. (2008). Utopia vs. reality: the effectiveness of in-service training courses for EFL teachers. *European Journal of Teacher Education*, *31*(3), 279-292.
- Nicolas, M. O. D. (2006). An exploration of an in-service programme as a means of the professional development of teachers: a case study. Retrieved 09/09/2015 https://lra.le.ac.uk/bitstream/2381/30913/1/U219959.pdf
- OECD. (2013). *Teachers for the 21st Century: Using Evaluation to Improve Teaching*. Retrieved from http://dx.doi.org/10.1787/9789264193864-en
- Opfer, V. D., & Pedder, D. (2011a). Conceptualizing Teacher Professional Learning. . *Review of Educational Research*, 81(3), 376-407.
- Opfer, V. D., & Pedder, D. (2011b). The lost promise of teacher professional development in England. *European Journal of Teacher Education, 34*(1), 3-24. doi:10.1080/02619768.2010.534131
- Örtenblad, A., Babur, M., & Kumari, R. (2012). Learning in Asia: Taylor & Francis.
- Pakistan Bureau of Statistics. (2017). *Monthly Bulletin of Statistics, January 2017*. Government of Pakistan. Retrieved from http://www.pbs.gov.pk/content/monthly-bulletin-statistics-january-2017.

- Pakistan Poverty Alleviation Fund. (2015). Situation Analysis & Baseline Surveys For Poverty Reduction through Rural Development in KPK, FATA &Balochistan. Development Profile of District Chitral. Retrieved from http://ppr.org.pk/PDF/District%20Profile%20Chitral.pdf
- Patton, K., Parker, M., & Tannehill, D. (2015). Helping Teachers Help Themselves. *NASSP Bulletin*, 99(1), 26-42. doi:10.1177/0192636515576040
- Patton, M. (2005). Qualitative research: Wiley Online Library.
- Penuel, W. R., Fishman, B. J., Yamaguchi, R., & Gallagher, L. P. (2007). What Makes Professional Development Effective? Strategies That Foster Curriculum Implementation. *American Educational Research Journal, 44*(4), 921-958. doi:10.3102/0002831207308221
- Phillips, P. (2008). Professional Development as a Critical Component of Continuing Teacher Quality. *Australian Journal of Teacher Education*, *33*(1), 38-45. doi:10.14221/ajte.2008v33n1.3
- Porter, A. C., Garet, M. S., Desimone, L., Yoon, K. S., & Birman, B. F. (2000). Does Professional Development Change Teaching Practice? Results from a Three-Year Study. Retrieved from http://files.eric.ed.gov/fulltext/ED455227.pdf
- Postholm, M. B. (2012). Teachers' professional development: a theoretical review. *Educational Research*, *54*(4), 405-429. doi:10.1080/00131881.2012.734725
- Prairie Research Associates. (n.d.). Reporting interview and focus group findings. Retrieved from http://www.pra.ca/resources/pages/files/technotes/fgfindings_e.pdf
- Putnam, R. T., & Borko, H. (2000). What do new views of knowledge and thinking have to say about research on teacher learning. . *Educational Researcher*, 29(1), 4-15.
- Pyle, A., Wade-Woolley, L., & Hutchinson, N. L. (2011). "Just listen to us": The Role of Teacher Empowerment in the Implementation of Responsiveness to Intervention. *Alberta Journal of Educational Research*, *57*(3), 258-272.
- Ramatlapana, K. A. (2009). Provision of in-service training of mathematics and science teachers in Botswana: teachers' perspectives. *Journal of Mathematics Teacher Education, 12*(2), 153-159.
- Rarieya, J. F. (2005). Reflective dialogue: What's in it for teachers? A Pakistan case. *Journal of In-Service Education*, *31*(2), 313-336.
- Razzaq, J., & Forde, C. (2014). The management of large-scale change in Pakistani education. *School Leadership & Management, 34*(3), 299-316.
- Retallick, J., & Mithani, S. (2003). The impact of a professional development program: a study from pakistan. *Journal of In-Service Education*, *29*(3), 405-422. doi:10.1080/13674580300200226
- Rinke, C., & Valli, L. (2010). Making Adequate Yearly Progress: Teacher Learning in School-Based Accountability Contexts. *Teachers College Record*, *112*(3), 645-684.
- Rizvi, M. (2008). The role of school principals in enhancing teacher professionalism: Lessons from Pakistan. *Educational Management Administration & Leadership, 36*(1), 85-100.
- Rizvi, M., & Elliott, B. (2007). Enhancing and sustaining teacher professionalism in Pakistan. *Teachers and Teaching*, *13*(1), 5-19. doi:10.1080/13540600601106021
- Robbins, P., & Wolfe, P. (1987). Reflections on a Hunter-based staff development project. *Educational Leadership*, 44(5), 56-61.
- Robinson, V. (2007). The impact of leadership on student outcomes: Making sense of the evidence. Retrieved 10/12/2016 http://donnaelder.wiki.westga.edu/file/view/The+impact+of+leadership+on+student+outcomes+an+analysis+of+the+differential+effects+of+leadership+types.pdf

- Rogers, M. P. (2003). Diffusion of innovations (5th ed.). New York: The Free Press.
- Rogers, M. P., Abell, S., Lannin, J., Wang, C.-Y., Musikul, K., Barker, D., & Dingman, S. (2007). Effective professional development in science and mathematics education: Teachers' and facilitators' views. *International Journal of Science and Mathematics Education*, *5*(3), 507-532.
- Rowold, J. (2007). Individual influences on knowledge acquisition in a call center training context in Germany. *International Journal of Training and Development, 11*(1), 21-34.
- Rubin, H. J., & Rubin, I. S. (2011). *Qualitative interviewing: The art of hearing data*. California: Sage.
- Saeed, A., Zulfiqar, S., Ata, G., & Rathore, K. (2015). Impact of Globalization and the Role of International Agencies in Education Policy Making Process of South Asian countries-a Case of Pakistan. *South Asian Studies*, *30*(2), 297.
- Sahlberg, P. (2009). The role of education in 22. promoting creativity: potential barriers and enabling factors. Retrieved 06/08/2016 https://www.greenschool.org/wp-content/uploads/2012/03/Pasi-Sahlberg.pdf
- Saiti, A., & Saitis, C. (2006). In-service training for teachers who work in full-day schools. Evidence from Greece. *European Journal of Teacher Education*, *29*(4), 455-470.
- Sandelowski, M. (2007). Sample size in qualitative research. *Research in Nursing and Health,* 18(20), 179-183.
- Saunders, R. (2014). Effectiveness of Research-Based Teacher Professional Development. *Australian Journal of Teacher Education*, 39(4). doi:10.14221/ajte.2014v39n4.10
- Schwandt, T. A. (2000). Three epistemological stances for qualitative inquiry: Interpretivism, hermeneutics, and social constructionism. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (Vol. 2, pp. 189-213). CA: Sage.
- Seçer, Z. (2010). An analysis of the effects of in-service teacher training on Turkish preschool teachers' attitudes towards inclusion. *International Journal of Early Years Education*, 18(1), 43-53.
- Shagrir, L. (2012). How evaluation processes affect the professional development of five teachers in higher education. . *Journal of the Scholarship of Teaching and Learning,* 12(1), 23-35.
- Sheridan, L. D. (2013). Changes in Pre-service Teachers Perceptions' of Teacher Qualities: Development from Egocentric to Student Centric. *Australian Journal of Teacher Education*, *38*(9). doi:10.14221/ajte.2013v38n9.2
- Shulman, L. S. (1986). Those Who Understand: Knowledge Growth in Teaching. *Educational Researcher*, *15*(2), 4-14. doi:10.3102/0013189x015002004
- Siddiqui, S. (2007). *Rethinking education in Pakistan: Perceptions, practices, and possibilities*. Lahore: Paramount Publishing Enterprise.
- Siddiqui, S. (2016). *Education Policies in Pakistan: Politics, Projections, and Practices.* Karachi: Oxford University Press.
- Silins, H. C., Mulford, W. R., & Zarins, S. (2002). Organizational learning and school change. *Educational Administration Quarterly, 38*(5), 613-642.
- Simkins, T., Garrett, V., Memon, M., & Ali, R. N. (1998). The role perceptions of government and non-government headteachers in Pakistan. *Educational Management & Administration*, 26(2), 131-146.
- Simkins, T., Sisum, C., & Memon, M. (2003). School leadership in Pakistan: Exploring the headteacher's role. *School Effectiveness and School Improvement*, *14*(3), 275-291.

- Simon, H. A. (2000). Observations on the sciences of science learning. *Journal of Applied Developmental Psychology*, *21*(1), 115-121.
- Smyth, J. (2013). Losing our way? Challenging the direction of teacher education in Australia by reframing it around the Socially Just School. *Asia-Pacific Journal of Teacher Education*, *41*(1), 111-122. doi:10.1080/1359866x.2012.753990
- Soine, K. M., & Lumpe, A. (2014). Measuring characteristics of teacher professional development. *Teacher Development, 18*(3), 303-333. doi:10.1080/13664530.2014.911775
- South Asian Forum for Educational Development. (2014). *Annual Status of Education Report, Pakistan*. Retrieved from

 http://www.aserpakistan.org/document/aser/2014/reports/national/ASER_National_Report_2014.pdf
- Sparks, D., & Loucks-Horsley, S. (1989). Five models of staff development for teachers. . Journal of Staff Development, 10(4), 40-57.
- Stake, R. E. (2000). Case Studies In: Denzin N. and Lincoln, Y.(Ed.). Handbook of qualitative research (pp. 435-455): Sage Publications: California.
- Strauss, A., & Corbin, J. (1998). Basics of qualitative research: Techniques and processes for developing grounded theory (2nd ed.). London: Sage Publications, Inc.
- Sturgis, P. (2008). Designing samples. In N. Gilbert (Ed.), *Researching social life* (pp. 165-181). Los Angeles: SAGE Publications.
- Sturman, A. (1999). Case study methods. Issues in educational research, 103-112.
- Swaffield, S. (2014). Models of professional learning and the global imperative of professional development in education. *Professional Development in Education, 40*(3), 331-335. doi:10.1080/19415257.2014.919128
- Tajik, M. A. (2008). External change agents in developed and developing countries. *Improving Schools*, 11(3), 251-271.
- Taylor, E. W. (2009). Fostering transformative learning. *Transformative learning in practice: Insights from community, workplace, and higher education*, 3-17.
- The World Bank. (2004). World development report 2004: Making services work for poor people.

 Retrieved from
 https://openknowledge.worldbank.org/bitstream/handle/10986/5986/WDR%202004%20-%20English.pdf?sequence=1
- Thiessen, D. (1992). Classroom-based teacher development. In A. Hargreaves & M. Fullan (Eds.), *Understanding teacher development* (pp. 85-109). New York: Teachers College Press.
- Thompson, C. L., & Zeuli, J. S. (1999). The frame and the tapestry: Standards-based reform and professional development. *Teaching as the learning profession: Handbook of policy and practice*, 341-375.
- Timperley, H. (2008). Teacher professional learning and development. *Educational Practices*Series 18. Retrieved from

 http://research.acer.edu.au/cgi/viewcontent.cgi?article=1003&context=research_conference_2003_website:
- Timperley, H., & Alton-Lee, A. (2008). Reframing Teacher Professional Learning: An Alternative Policy Approach to Strengthening Valued Outcomes for Diverse Learners. *Review of Research in Education*, 32(1), 328-369. doi:10.3102/0091732x07308968
- Timperley, H., Wilson, A., Barrar, H., & Fung, I. (2008). Teacher professional learning and development. Retrieved 03/11/2016 http://edu.aru.ac.th/childedu/images/PDF/benjamaporn/EdPractices_18.pdf

- Trede, F., & McEwen, C. (2016a). Carving out the territory for educating the deliberate professional. In F. Trede & C. McEwen (Eds.), *Educating the Deliberate Professional* (pp. 15-28). Switzerland: Springer.
- Trede, F., & McEwen, C. (2016b). Scoping the Deliberate Professional. In F. Trede & C. McEwen (Eds.), *Educating the Deliberate Professional* (pp. 3-14). Switzerland: Springer.
- Trehan, R., & Paul, J. (2014). Determinants of attitude of teachers–factor analysis and strategies for success. *Competitiveness Review*, 24(1), 5-19.
- UNESCO. (1996). Strengthening the role of the teachers in a changing world: Issues, prospects and priorities. Retrieved from http://unesdoc.unesco.org/images/0010/001048/104891e.pdf:
- UNESCO. (2006). Situation analysis of Teacher Education: Towards a strategic framework for teacher education and professional development, Pakistan Retrieved from http://unesco.org.pk/education/teachereducation/files/sa1.pdf
- UNESCO. (2011). *World data on education: Pakistan*. Retrieved from http://www.ibe.unesco.org/sites/default/files/Pakistan.pdf
- UNESCO. (2014). *Teaching and learning: Achieving quality for all* (9231042556). Retrieved from http://unesdoc.unesco.org/images/0022/002256/225660e.pdf
- UNESCO. (2015). Global Monitoring Report 2015: Education for all 2000–2015: Achievements and Challenges. Retrieved from http://unesdoc.unesco.org/images/0023/002322/232205e.pdf
- UNESCO. (2016). Education for people and planet: Creating sustainable futures for all. Global Education Monitoring Report. . Retrieved from http://unesdoc.unesco.org/images/0024/002457/245752e.pdf
- USAID. (2007). Final Assessment of the Pakistan Teacher Education and Professional Development Program (PTEPDP). Retrieved from http://pdf.usaid.gov/pdf_docs/Pdacl611.pdf
- USAID. (2010). Rationalization of Pre-Service Teacher Education Programs in Pakistan. Implemented by Academy for Educational Development in collaboration with Higher Education Commission and Ministry of Education Government of Pakistan.
- USAID. (2011). EQUIP2 Lessons Learned in Education: Teacher Professional Development, A Guide to Education Project Design, Evaluation, and Implementation Based on Experiences from EQUIP2 Projects in Djibouti, Liberia, and Pakistan. Retrieved from https://www.epdc.org/sites/default/files/documents/EQUIP2%20LL%20TPD%20AAR.pdf
- Vazir, N. (2004). Research ethics: significance, application and obligation to the practice of research. *Journal of Educational Research*, 7(1-2), 3-10.
- Villegas-Reimers, E. (2003). *Teacher professional development: an international review of the literature*. Paris: International Institute for Educational Planning.
- Walker, A., & Dimmock, C. (2000). One size fits all? Teacher appraisal in a Chinese culture. Journal of Personnel Evaluation in Education, 14(2), 155-178.
- Walliman, N. (2010). Research methods: The basics. New York: Routledge.
- Watson, C., & Michael, M. K. (2015). Translations of policy and shifting demands of teacher professionalism: from CPD to professional learning. *Journal of Education Policy*, 31(3), 259-274. doi:10.1080/02680939.2015.1092053
- Wayne, A. J., Yoon, K. S., Zhu, P., Cronen, S., & Garet, M. S. (2008). Experimenting with teacher professional development: Motives and methods. *Educational Researcher*, *37*(8), 469-479.

- Webb, C. (1993). Teacher perceptions of professional development needs and the implementation of the K–6 Science and Technology syllabus. *Research in Science Education*, 23, 327-336.
- Webster-Wright, A. (2009). Reframing Professional Development Through Understanding Authentic Professional Learning. *Review of Educational Research*, 79(2), 702-739. doi:10.3102/0034654308330970
- Wells, M. (2014). Elements of effective and sustainable professional learning. *Professional Development in Education*, 40(3), 488-504.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*: Cambridge university press.
- Westbrook, J., Shah, N., Durrani, N., Tikly, C., Khan, W., & Dunne, M. (2009). Becoming a teacher: Transitions from training to the classroom in the NWFP, Pakistan. *International Journal of Educational Development*, *29*(4), 437-444. doi:10.1016/j.ijedudev.2008.12.001
- White, D. G., & Levin, J. A. (2016). Navigating the turbulent waters of school reform guided by Complexity Theory. *Complicity*, *13*(1), 43-52.
- Willig, C. (2013). Introducing qualitative research in psychology. UK: McGraw-Hill Education.
- Willis, J. W., & Jost, M. (2007). Foundations of qualitative research: Interpretive and critical approaches. Melbourne: Sage.
- World Education Forum. (2000). *The Dakar Framework for Action*. Retrieved from http://unesdoc.unesco.org/images/0012/001211/121147e.pdf
- Yin, R. K. (2013). Case study research: Design and methods. Melbourne: Sage publications.
- Yuen-Kwan, W. L. (1998). How Sustainable Are In-service Teacher-training Courses? *Asia-Pacific Journal of Teacher Education*, 26(1), 65-73.
- Zepeda, S. J., Parylo, O., & Bengtson, E. (2013). Analyzing principal professional development practices through the lens of adult learning theory. *Professional Development in Education*, 40(2), 295-315. doi:10.1080/19415257.2013.821667