



Effectiveness Of Continuous Professional Development Program As Perceived By Primary Level Teachers

Amna Saleem, Lecturer, Department of Education, The Women University, Multan, Punjab, Pakistan
Adnan Ahmad Dogar, Department of Development Studies, COMSATS University Islamabad, Pakistan
Abbottabad Campus

Abstract. Incompetent and demoralized primary school teachers are the main cause of poor primary education in Pakistan. To overcome this issue, effective professional developments are provided to primary school teachers. DSD introduced a new teacher training program for the development of the primary teachers which is called a continuous professional development program framework. To know whether this program has attained its objectives or not this study has been conducted. The purpose of this study was to determine the effectiveness of a continuous professional development program as perceived by primary level teachers. It was a descriptive study. The researchers employed a simple random sampling technique and questionnaire to collect data for the study. The questionnaire was developed on four components of the continuous professional development framework. These components were continuous professional development (training), continuous assessment, mentoring and professional development day. The researcher employed mean, frequency, and percentages. Z test was used for the analysis of area (rural and urban) and gender (male/female) and ANOVA was used for the analysis of demographic variables of the questionnaire were respondents' age, qualification, and teaching experience. The findings of this study exposed that the majority of the primary school teachers showed a positive attitude towards continuous professional development program. Significant recommendations for the study were; Continuous professional development may develop better interaction between students and teachers and continuous assessment should be included to improve the learning skills of students.

Keywords: Continuous professional development, Continuous assessment, mentoring, professional development day, primary school teacher (PST).

INTRODUCTION

It is universally accepted that teacher is the major facilitator of all educational activities which take place either within the institution or outside the institution. A teacher is a person around whom all the activities and curriculum revolve. The teaching profession has great importance in every society. The reason is that teaching is not only the facilitator of educational, curricular, and co-curricular activities but he/she helps to educate people who become history makers for a nation. The teacher requires two types of knowledge, content knowledge and pedagogical knowledge. He also requires two types of qualities personal and professional. If a teacher combines both types of qualities, in content and functional areas, he/she can achieve his/her objectives and may be called a good teacher or an effective teacher in the educational delivery process. Teacher quality is the factor that matters the most for student learning. It is globally accepted that teaching is one of the largest professions in the world in terms of its members. Like other professions, it also has some special features (Wabule, 2016).

Teaching is an interactive activity that is based on learner and teacher. The basic and foremost purpose of teaching is to help mankind. Teaching aims to enhance learning. It is curriculum oriented. It is based on already decided objectives. It is less flexible. The nature of the relationship between teacher and student is qualitative. Teaching is considered a lifelong career activity. The teaching profession has set standards which teacher must follow (David & Bwisa, 2013).

When one person imparts information or skill to another, it is common to describe the action as teaching. But not only every way of bringing about learning in other counts as teaching, but every act of teaching has also been placed within the program of education. The philosopher of education has analyzed the concept of teaching in its generic sense and has attempted to distinguish educative teaching from related

concepts such as training, conditioning. A central theme of these efforts has been to show that these related activities result in the defective form of learning because they fail to engage adequately in teaching the rational powers of the student (Purdon, 2003).

The improvement of the profession of education lies in the hands of the teacher's education. There is a positive association between the quality of teacher and student achievement. It means the quality of teachers enhances student's performance. This study shows that there is an association between in-service training and student achievement (Angist&Lavy, 2001).

The competence of the teacher means the teachers' ability to apply new knowledge, behaviors, abilities, and skills. It also includes the personal qualities of teachers that are necessary for the successful accomplishment of the task. It is related to teacher attributes like emotional, social, cognitive, intellectual and psychomotor(Ahuja,2015).

Components of competency are divided into three types that are cognitive, affective, and performance competence. Cognitive competence is related to knowledge and information. Affective competence is related to attitude, value judgments, and emotions. Performance competence includes reading, writing, and typing, etc. Teachers' commitment and competence are two important factors that influence the quality of education. These factors also determine the teachers' performance. To attain teacher competence training is necessary for the teachers (Cornell,2003).

"The training aims to develop potential knowledge and skills of the trainees to carry out defined tasks" (Agochia, 2001).

Training of teachers is necessary for their professional development. Training improves the effectiveness and efficiency of the Individual as well as the institution. Training is helpful to solve day to day problems and develop an association with their colleagues. There are three types of training, pre-service, in-service, and induction training. In pre-service training, the program individual is prepared for specific professions. It is related to the professional qualification that is required for becoming a teacher e.g. B. Ed, M.Ed. Induction training is provided to newly selected teachers before they enter their classrooms. In-service training is provided to those individuals when there is a difference between the actual and expected performance of the individual. Educational personnel (teachers and managers) all were passed through these training programs. There are two types of in-service training one is on the job and the other is off the job training (Herbert & Rainford,2014).

In the past, in-service training programs provide site training to teachers for their professional development. Off the job training is provided outside their workplace. In this training program, the same type of training is given to all the teachers. Individual difference of teachers like their IQ level, subject mastery, and competence in pedagogical skill does not care. It is difficult for the teacher to attend these training programs because training centers are far away from the schools. While off the job training in general. There is no effective way to assess the effectiveness of job training. Only knowledge is provided to the participants. Practical training is not provided to the trainees (Al Asmari,2016).

On the job training, training is provided to the individual at the workplace with available resources of the institution. Training is given to an individual according to his/her need. It means it is specific. Assessment of training efficiency can be easily evaluated by the mentor. Trainers are highly motivated in on-the-job training as compared with the job. Trainees easily communicate with the trainers and systematically develop their abilities (Angrist & Lavy,2001).

Due to the effectiveness of the teacher education program, teacher efficiency and effectiveness have been improved in his/her classroom. Knowledge and competency of the teacher is an important feature of the teacher education program. For effective teaching, teachers must have sound knowledge and professional skill (Khan & Khan, 2014).

Professional development is necessary for the reformation of the school and to improve the performance of the school. Professional development is a continuous process that empowers the individual teacher. It enables teachers to diagnose classroom problems and ways to solve these problems. Due to the professional development of the teacher, student learning outcomes will be improved. It prepares teachers to meet world-class standards (Gray,2005).

The process of professional development is well planned, ongoing, and long-term. It enhances the teaching competence of the teacher. It enhances teacher monitoring and assessment skills in his classroom. Training is provided according to the teacher's needs. It is collaborative. Follow up services are part and parcel of professional development activities (Craft, 2002).

Continuous professional development helps teachers how to implement new teaching strategies in classrooms. The continuous professional development process should not be linear. Its process should be well planned and long term. The continuous professional development program is evaluated on these aspects. teachers' subject knowledge, teachers' teaching skills, self-efficacy of teachers, and student attainment of outcomes. It improves the performance of the school as well as students' achievement (Bolam & Weindling,2006).

Memon (2007) said that with the help of continuous professional development, the teacher attains these purposes like improving teaching methods, enhancing teachers' academic abilities, and research skills. Due to continuous professional development teacher organizes effective and comfortable environment for the learning of students.

Continuous professional development is a continuous process of training and follows up with all the educational personnel to change the classroom behavior of teachers. The objective is to enhance the quality of the teaching and learning process (DSD, 2007b).

Continuous professional development develops innovation skills among teachers. It helps teachers to increase their confidence and motivates them to do their job more effectively in their classroom. Teachers get knowledge about new teaching skills, technology, and how these are used in their classrooms. The specific standard should be maintained to get the desired results. It develops reflective thinking among teachers. It is helpful for teachers to identify gaps in their knowledge and experience. It helps an individual to adopt positive changes in their work It develops scientific thinking among teachers. It motivates and helps teachers to perform their current duty in a better way. It helps teachers to adopt new roles. It provides opportunities for the teacher for their career progression (McArdle & Coutts,2010).

In Pakistan, the purpose of continuous professional development is to improve the quality of the teaching and learning process. Quality is assuring with the help of subject mastery of teachers, their teaching skills, and their positive attitude in the classroom. The purpose of continuous professional developments to enhance professional competence, quality of education, motivation, and accountability of teachers. (DSD, 2007a).

For the professional development of the teachers, several in-service training programs have been conducted in Pakistan. But these programs did not bring desirable changes among teachers and students. Due to the unsuccessful results of these training programs educational planners provide this training program. In the past training programs were decontextualized in their nature. They did not provide feedback to teachers in time and trainers did not give proper reinforcement to them. In the past training models, all the teachers had to come in one common place for the training purpose. It is difficult for rural teachers to attend these training programs because training centers are too far away from their posting areas and in most of the rural school there is only one teacher. Due to these defects in previous training programs, DSD launched a new training program which is called a continuous professional development framework. This framework is constructed for primary level teachers. It provides on the job training to primary teachers with follow up services. Mentor guide teachers according to the teacher's needs. Mentors guide teachers in their actual classroom (DSD, 2007b).

Continuous professional development is the hot and burning issue of the present day. Students are the future of every country and to save the future, good primary education is necessary. If a child's basic education is on a strong basis, then chances of becoming a useful citizen will be increased. This model of training has features of monitoring, follow up service mentoring, accountability, incentives, and in-class support to teachers that were missing in previous models. Primary education is playing the role of the backbone for student development. A lot of finance is invested by the Punjab government in this project. To know whether this Program has attained its objectives or not this study is conducted. It provides an understanding of the continuous professional development framework for the educational personnel of Pakistan. In previous researches, components of continuous professional development like continuous assessment, continuous professional development, and professional development day have not been discussed which is why this topic has been selected. The study covers almost all the aspects of continuous professional development at the primary level in Punjab (DSD,2007a).

In Pakistan, satisfactory results are not obtained through teacher training programs. Incompetent and demoralized primary school teachers are the main cause of the poor standard of primary education in Pakistan. To overcome this issue, DSD introduced a new teacher training program for the development of the primary school teachers which is called a continuous professional development framework. The continuous professional development program has qualities of both in-service training, follow up and on the job support

at their workplace. It has all those qualities that were missing in previous training models. This study aimed at “Determining the Effectiveness of Continuous Professional Development Program as perceived by Primary level teachers.”

REVIEW OF RELATED LITERATURE

According to Gray (2005), continuing professional development of the individual is an ongoing process that has been started after his initial training. This training is provided at on – job to the individuals to become lifelong learners. Continuous professional development is a systematic and ongoing process. It improves the knowledge, expertise, and competency of individuals for their entire work in life. It increases the level of job satisfaction of the employees. Continuous professional development is provided according to the needs of society, organization, and personnel.

Continuing professional development is a long-term process. It involves opportunities and experiences. It plans and organizes systematically to promote the professional development of teachers both individually and collectively to enhance the quality of learning. (Ganser, 2000)

According to Friedman, Davis and Phillips (2000). Continuous professional development is a process/program that develops the personal qualities among individuals that are necessary to perform their professional and technical roles. It systematically enhances and enlarges the knowledge and skill of the individual throughout the individual’s working life.

Continuous professional development is long term process. It fulfills the personal as well as professional needs of the individual for effective professional development. It must be according to the needs of the individual. Individual needs vary according to the environment, personal and professional histories, and current status CPD Provides learning experiences according to the workplace so that it has a positive influence on pupils' performance (Luneta,2012).

Purposes of CPD

CPD activities must fulfill the needs of the teacher as well as students and the institution. It creates innovation skills among teachers. It helps teachers to increase their confidence and motivates them to do their job more effectively in the classroom. Teachers get knowledge about new teaching skills, technology, and how these are used in the classroom. A specific standard should be maintained to get the desired results. It develops scientific thinking among teachers. It motivates and helps teachers to perform their current duty in a better way. It helps teachers to adopt new roles. It provides opportunities to the teacher for their career progression. It is necessary for the future professional development of the teacher (McArdle & Coutts, 2010).

Models for CPD

These are the models for continuous professional development for teachers.

Training Model

This is the most acceptable and renewed model of continuous professional development for teachers. It is a skill-based model where skills are taught by the experts to the teachers. Training may be given on-site as well as off-site. But most of the time, off-site training is provided to the teachers. The main focus of this model on standardization of the teaching process. This model ignores the need of the teachers. This model is the most effective model to introduce new knowledge. In this model role of the teacher is passive and the role of the expert is active (Hoban, 2002).

The Deficit Model

In this model, deficiencies in teachers’ performance are identified and a professional development program is developed in this way where these deficiencies can be removed. There is two main cause of the poor performance of teacher; one is related with individual and other is related to the organizational and management practices (Rhodes & Beneick,2003).

Cascade Model

In this model, training is given to a few teachers and teachers show their experiences of training with their colleagues. The benefit of this training model is cost-effectiveness. With the help of limited resources, this

type of training may be conducted. The focus of this model is on skills and knowledge. This model ignores the values. This model ignores the content of learning (Nieto, 2003).

Standard-based Model

This model considers teaching as a complex process. It also considers the political and moral content of the learning process. This model adopts the behavioristic approach of learning and emphasis on the enhancement of teacher competency. The drawback of this model is a lack of respect for teachers. Clear expectations are set for the teachers and teachers must take the responsibility to fulfill these expectations (Gartia & Sharma,2013).

Coaching / Mentoring Model

The main feature of this model is the one-to-one relationship between two teachers. Coaching and mentoring both have these characteristics. Coaching is more skill-oriented while mentoring is related to counseling and professional friendship. In the mentoring process, one member is more experienced in and nature and the other members are immature. Professional learning can take place within the school content; experience teachers also provide information about the social and cultural norms within the institution. This model has the feature of supportive and assessment-driven. Due to this model, the quality of the interpersonal relationship is developed among teachers. This model supports the transformative and transmission of CPD (Rhoders & Beneicke, 2002).

The transformative Model

This model is a combination of different processors and conditions. The transformative model identifies the different conditions required for transformative practice. This model supports the educational change. This model differentiates between the knowledge-focused and contextual based model and community of practice model (Nieto, 2003).

Action Research Model

In the action research model, the teacher works as a researcher and improves his understanding of the situation and his teaching practice. This model is collaborative. The role of the teacher is very active as compared with the other models. It creates professional independence among teacher school (Edwards,2016).

As far as Pakistan is concerned many agencies are responsible for providing opportunities for CPD to teachers. The directorate of staff development is one of those.

DSD - Directorate of Staff Development

The directorate of staff development has been providing valuable services in the field of teacher training for the last 50 years. The prime aim of the DSD is to produce well-informed, hardworking, dedicated, motivated teaching and non-teaching staff. It gives guidelines to the Punjab Public Policy regarding teachers' salary structure, training, and certification. Provide quality pre-service institution. Conduct professional development activities for public school teachers of Punjab. It develops the capacity for district government and related institutions. It develops master trainers for training. It conducts pre-service and in-service teachers training program. It gives training to primary teachers, elementary teachers, IT & science teachers training of Heads, EDO, DEOs and DDO's AEO's. Update taleemi calendar and Dastoor-ul- Amal (DSD,2007a).

Continue professional development framework in Pakistan

In the light of previous experience, it has been observed that the cause of ineffective training is two that is lack of follow-up and lack of onsite support. Quality of education depends upon the proficiency of the teachers and managers. Both the teachers and managers of education should know their roles and responsibilities (DSD, 2007b)

The concept of the framework of CPD framework is based upon clustering. The quality of student learning outcomes is associated with the quality of teachers. An effective teacher can inspire his student and effectively instruct them. DSD conducts continuous professional development programs for a large number of teachers to achieve the qualitative as well as quantitative objectives of PESRSP. The target Population for continuous professional development is the least qualified teachers. The least qualified teachers are those

who have a degree of matriculation and CT or PTC of professional degree. The framework of CPD is standardized; it covers all the aspects like classroom management skills, knowledge of learners and subject mastery, etc that are necessary for making PSTs more effective in their duties (DSD, 2007c).

In the framework of CPD, a primary school teacher is the most important figure. This framework has two components; one is DSD delivery related components and the second is the mechanism and policy-related. The purpose of DSD delivery related components is to improve the skills, knowledge, and attitude of primary teachers while they are performing their duties. PSTs teachers enhance these qualities with the help of peer coaching, mentoring services provided by DTEs, and teacher support material. The component of mechanism and planning is associated with recruitment; monitoring, organizing, and appraising PSTs. DSD also develops research-based material which was finalized after pilot projecting and according to its actual usage in DTSC and CTSC. This instructional material consists of six subjects that were taught by primary school teacher because of the large number of primary school teachers, DSD divide 35 districts into three phases (DSD,2007a).

For the implementation of the CPD framework more effectively, the lead teacher educator was prepared. The purpose was to train the group of a master trainer who guides and mentor DTEs. Then this guide, help, mentor and coordinate with PSTs. DTEs provide instructional support material and activities to PSTs. Lead teacher as trained on these criteria. He trains them in this way they work as a change agent. Lead teacher educators should be taught effective teaching and learning strategies. Lead teacher educators should be masters in English, science, and mathematics, and social sciences (DSD, 2007b).

It broadens the scope of teacher development from teacher training to continuous professional development is all about in-service training with proper follow-up, in-class teacher support, mentoring accountability, monitoring, incentives, and teachers' career growth. It had all features that were missing in previous training programs of Punjab (DSD, 2007c).

Continuous professional development is a continuous process of training and follow-up of all the education personnel to change the classroom behavior of teachers (DSD, 2007a).

The main and foremost purpose of the CPD Framework is to improve the quality of the educational process; this means CPD improves the teaching and learning process. The areas through which quality of teaching can be improved are subject knowledge, pedagogical skills, the positive attitude of the teacher, and teachers' ability to provide a child-friendly environment to students. Continuous professional development program not only improves the performance of the primary teachers but also improves the performance of education managers. CPD Framework is based upon these training reports, independent evaluation, external monitoring, and results of PEC examination (DSD, 2007b).

Components of CPD Framework

- Planning
- Mentoring
- Training (continuous professional development)
- Monitoring
- Assessment
- Management
- Reporting
- Coordination

CTSCs contain all types of resources that fulfill the professional needs of the PSTs. Two district teacher educators are employed in each cluster. Maximum five DTE's according to the need of the situation. The norm for the allocation of DTEs is 10-15 a school per DTE. It is established at that place that is easily accessible for the head teacher, DTEs and PSTs. With the help of CTSC distance between DTE and PSTs has been reduced. CTSC plays the role of assistant in DSD and DTSC. CTSC provides Follow up mentoring services to PSTs. It also provides pedagogical support to PSTs. It conducts workshops and in-service courses for PSTs for effective implementation of the CPD framework (DSD, 2007a).

DTSC stands for district training and support centers. It works like a human resource development hub. The Head of the DTSC is the GCET principle or H/M of Govt. school acts as the Head of DTSC. DTSC is placed in all the districts, to determine the training needs of elementary, secondary, and higher secondary teachers. It develops an action plan for CPD activities. It coordinates CPD activities at the district level.

Organize the In-service training courses for elementary, secondary, and higher secondary teachers. It ensures the quality of training courses at the district level. (DSD, 2007a)

According to DSD (2007b), these are the qualities of which district teacher educators should have. This should be a well versed and knowledgeable person. He should be an expert in his field, use a multiplicity of techniques and skills for mentoring teachers. He should set high standards for teaching. DTE should effectively communicate with other teachers. He should have good judgment ability. His attitude is positive towards teachers. He sets goals and works hard to achieve these goals. He is a good planner and promotes reflective thinking among teachers. DTE is the most important member of the CPD Framework. He plays the role of mentor, trainer coordinator, manager, monitor, assessor, and reporter. For the effective implementation of the CPD Framework Directorate of Staff Development has adopted a decentralized approach. In a continuous professional development framework, all the activities are planned and executed according to the guideline provided by the Punjab government.

Objectives Of the Study

- To explore the primary school teachers' experience related to Continuous professional development program.
- To determine the impact of continuous professional development on the performance of primary school teachers.
- To assess the effectiveness of the continuous assessment process made by district teacher educators.
- To assess the effectiveness of professional development day.

Research Hypothesis

- There is no difference between the performance of male and female primary school teachers on a continuous professional development program.
- There is no difference between the performance of rural and urban primary school teachers on a continuous professional development program.
- There is no difference among the performances of primary school teachers of different age groups on a continuous professional development program.
- There is no difference between the performances of primary school teachers with different teaching experiences on a continuous professional development program.
- There is no difference between the performances of primary school teachers having different qualifications on a continuous professional development program.

CONCEPTUAL FRAMEWORK FOR THE STUDY

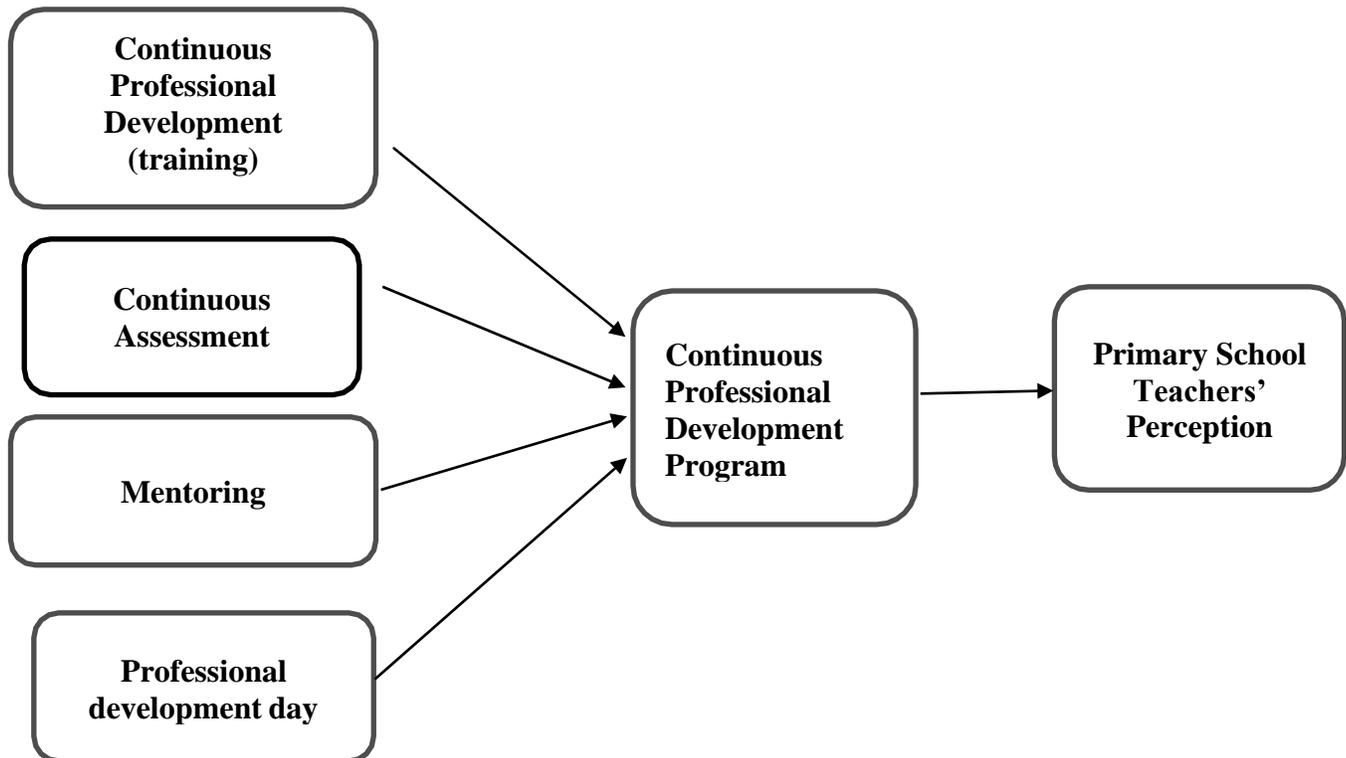


Figure 1. *Conceptual framework of the study*

This study is based upon positivism paradigm of research and it was a quantitative study. The conceptual framework for this study depicts that the continuous professional development program was working as an independent variable and primary school teachers' perception was working as the dependent variable. This study explains how factors of continuous professional development program (continuous professional development training, mentoring continuous assessment, and professional development day) influence primary school teachers' perception related to the continuous professional development program.

RESEARCH METHODOLOGY

A survey design was used by the researcher to conduct this study. The nature of this study was descriptive and quantitative data analysis has been done for this study. It deals with these variables, gender (male-female), area (rural and urban), age, teaching experience, and qualification.

Population and Sample

The purpose of the study was to know primary teachers' perception towards continuous professional development program which was arranged by the directorate of staff development, Punjab. So the target population for this study was all the primary school teachers of public schools of Punjab. To select the sample for this study, the researchers employed a simple random sampling technique. The researchers selected 323 respondents of which 126 males and 197 females were included.

Instrument Development

The research study was descriptive and a questionnaire was used as a tool to collect the data. The researcher made a literature review regarding continuous professional development intensively and after that, she prepared the research instrument. The researchers developed the questionnaire by using 5 points Likert scale. The research Instrument had four parts. The first part was related to continuous professional development it had 15 items, the second part was continuous assessment and it had 11 items, the third part was mentoring and it had 11 items and the last part was related to professional development day and it had 7

items. To validate the instrument, the researchers pursued the expert opinion of a specialist in the field of professional development and refine the tool in the opinion of the experts. For the reliability of instrument testing, Cronbach alpha was estimated and its value was 0.87.

Data analysis

The questionnaires received from the respondents were analyzed in terms of descriptive and inferential statistics. In descriptive statistics researcher used Mean, frequency, and percentage. Z-test was used to identify the statistically significant difference between the performance of male and female and rural and urban respondents. For the analysis of the demographic variables (age, qualification, and teaching experience) ANOVA was used by the researcher.

Descriptive Analysis

Table 1: Descriptive Statistics of Continuous Professional Development (training)

Statements	Strongly agree		Agree		Undecided		Disagree		Strongly disagree		Mean
	F	%	F	%	F	%	f	%	F	%	
Continuous professional development fulfills my academic needs.	131	40.56	153	47	14	4.3	18	5	7	2.1	4.19
Continuous professional development clarifies my understanding of implementing a formative evaluation plan in my class.	96	30	189	58	27	8	2	0.7	9	3	4.12
Continuous professional development helps me in gaining new information and skills.	140	43	146	45	27	8	5	2	5	2	4.27
Continuous professional development indicates important resources for my teaching.	117	36	156	48	23	7	18	5	9	3	4.17
Continuous professional development motivates me to perform better in my job.	121	37	140	43	34	10	25	8	3	1	4.09

My teaching skills are developed as a result of continuous professional development.	116	36	165	51	29	7	9	3	9	3	4.15
After applying continuous professional development I use A.V aids in a better way in my classroom situation.	113	35	165	51	22	6	14	4	9	3	4.11
Continuous professional development provides career opportunities for me.	58	18	83	25	36	11	57	18	89	27	2.89
Due to the CPD, my overall performance in class is improved.	109	34	163	50	29	9	13	4	09	3	4.08
Due to the CPD, my overall performance in class is improved.	125	34	157	49	19	6	11	3	11	3	4.16
Continuous professional development develops better interaction between me and my students.	60	18	75	23	25	7	67	20	96	30	2.80
Continuous professional development is a wastage of time during the teaching session.	62	19	93	29	36	11	84	26	48	15	3.11
Due to Continuous professional development better cooperation was developed between me and my colleagues.	94	29	147	45	38	12	32	10	12	4	3.86
Due to the CPD, my assessment skills are improved.	105	32	152	47	37	11	20	6	9	3	4.0
Continuous professional development develops reflective thinking in me.	61	19	89	27	12	3.27	54	17	107	33	2.82

Table no 01 Illustrate that the participants' responses to the factor of continuous professional development (Training) collected by the investigators. The outcome of the descriptive statistics exposed that most of the participants have a positive attitude towards continuous professional development (training) but on some

statements, they disagreed that Continuous professional development did not provide career opportunities for them and did not develop reflective thinking among them. They also reject that CPD did not helpful for developing better interaction with their students.

Table 2. Descriptive Statistics of Continuous Assessment

Statements	Strongly agree		Agree		undecided		disagree		Strongly disagree		Mean
	F	%	f	%	F	%	f	%	f	%	
Continuous assessment assists me in the development of the learners.	147	45	154	48	9	3	8	2	5	1	4.33
Continuous assessment is suitable to determine the learner's progress.	116	36	170	52	15	5	15	5	7	2	4.15
Continuous assessment is a burden on primary school teachers in the shape of extra work.	72	22	69	21	25	8	89	27	68	21	2.96
Continuous assessment is one of the sources of quality education.	125	39	148	46	26	3	18	5	6	2	4.14
Continuous assessment assists me in identifying student's problems in mastering skills.	98	30	171	53	33	10	15	5	6	2	4.05
Continuous assessment motivates the learner to participate actively in their learning activity.	69	21	68	21	29	9	65	20	92	28	2.87
Continuous assessment provides opportunities to identify students' strengths and weaknesses.	121	37	139	43	37	11	15	5	11	3	4.07
Continuous assessment improves my students learning skills.	54	17	74	23	32	10	78	24	85	26	2.80
I am satisfied with the criteria for the marking scheme of my	80	25	139	43	30	9	50	15	24	7	3.62

students.											
Due to the continuous assessment of my students, my results have been improved.	99	31	158	49	23	7	22	7	21	6	3.90
Criteria for assessment of students are reliable.	87	27	150	46	28	9	29	9	29	9	3.73

Table no 2 illustrates the participants' responses to the factor of continuous assessment collected by the investigators. The outcome of the descriptive statistics exposed that most of the participants have a positive attitude towards the continuous assessment process conducted by district teacher educators but on some statements their opinion was different. They show disagreement that continuous assessment did not motivate the learners to participate actively in their learning activity and did not improve their students learning skills.

Table 3: Descriptive Statistics of Mentoring

Statements	Strongly agree		Agree		undecided		disagree		Strongly disagree		Mean
	F	%	f	%	F	%	f	%	f	%	
Mentoring helps me in gaining mastery over my subjects.	135	42	136	42	20	6	19	6	13	4	4.28
Mentoring enables me to teach effectively.	74	23	73	23	10	3	13	4	153	47	2.70
Mentoring assists me to identify and solve classroom problems.	108	33	155	48	25	8	18	5	17	5	4.01
Mentoring prepares me for my professional growth.	104	32	162	50	28	9	14	4	15	5	4.09
Mentoring teaches me to use teaching material effectively.	118	36	158	49	21	6	14	4	12	4	4.10
Mentoring creates a supportive and comfortable environment for my professional development.	64	20	75	23	34	10	39	12	111	34	2.82
Mentoring promotes reflective thinking in me.	91	28	162	50	28	9	26	8	16	4	3.89

The mentors' attitude towards me is authoritative.	34	10	90	27	32	10	98	30	69	21	2.76
My teaching efficiency is increased due to mentoring.	96	30	137	42	32	10	32	10	26	8	3.76
My confidence level is being raised due to the continuous guidance from my mentor.	125	39	129	40	20	6	30	9	19	5	3.75
I received useful and timely feedback from my mentor.	48	15	75	23	39	12	84	26	77	24	2.79

Table no 3 Illustrate that the participants' responses to the factor of mentoring collected by the investigators. The outcome of the descriptive statistics exposed that most of the participants have a positive attitude towards the mentoring process conducted by district teacher educators but on some statements their opinion was different. They show disagreement that mentoring did not enable them to teach effectively and mentors did not create a supportive and comfortable environment for their professional development. The outcome of the study exposes that mentor did not provide timely feedback to participants.

Table 4: Descriptive Statistics of Teachers Professional Development Day

Statements	Strongly agree		Agree		Undecided		Disagree		Strongly disagree		Mean
	cF	%	F	%	F	%	f	%	f	%	
District teacher educator is a knowledgeable person.	81	25	129	40	21	6	66	20	26	8	3.54
District teacher educator is trained in pedagogical skills.	86	26	151	47	22	7	43	13	21	6	3.74
District teacher educator is a role model for me.	49	15	85	26	35	11	76	23	78	24	2.85
I am satisfied with the attitude of my DTE towards me.	78	24	153	47	33	10	37	11	22	7	3.71
Professional development day is beneficial for me.	74	23	166	51	35	11	31	10	17	5	3.77
I have learned to develop low-cost A.V aids from my mentor.	89	27	156	48	20	6	35	11	23	7	3.78
Training materials related to CPD are relevant and helpful to me.	87	27	152	47	20	6	48	15	16	5	3.81

Table no 4 illustrates the participants' responses to the factor of professional development day collected by the investigators. The outcome of the descriptive statistics exposed that most of the participants have a positive attitude towards the professional development day conducted by district teacher educators but on some statements their opinion was different. They show disagreement that the mentor was a not role model for them.

Analysis based on Mean Score

This scale comprised of 44 statements which were administered to 323 primary school teachers. The scale was further divided into four factors (components) i-e continuous professional development, continuous assessment, and mentoring and professional development day. Primary school teachers' mean scores on each factor were computed and presented in tabular form.

Table 5: Mean scores of factors

Factors	Total Statement	Adjusted Mean
1	15	75.67(continuous professional development)
2	11	73.87(Continuous assessment)
3	11	70.76(Mentoring)
4	07	71.97(Professional Development Day)

In table no 05, the first column showed the factors which were F1 (continuous professional development), F2 (continuous assessment), F3 (mentoring), and F4 (professional development day). In the second column total statements of factors were given. In the third column adjusted mean of the factors was given. The reason why we used weighted mean instead of simple mean was that in developing the questionnaire researcher did not give equal weightage to all the factors. Due to that reason adjusted mean was calculated. The adjusted mean result showed that the respondent's average score was better on this first factor which was Continuous professional development as compared with the average scores of the other factors. Respondent's lowest score was on the third factor which was mentoring. In other cases it was moderate.

Factor analysis

The statements of the whole scale were divided into four components or factors. These factors were continuous professional development, continuous assessment, Mentoring, and professional development day.

Table 6. Inter Correlations between Factors (Factor matrix)

	F1	F2	F3	F4
F1		0.569	0.392	0.367
F2	0.569	1	0.610	0.533
F3	0.392	0.610	1	0.567
F4	0.367	0.533	0.567	1

Inter correlations were 0.569 (between F1&F2), inter-correlations were 0.392 (between F1&F3), and inter-correlations were 0.367 (between F1&F4) inter-correlations were 0.533 (between F2&F4) and inter-correlations were 0.567 (between F3&F4). A high correlation coefficient (0.569) was observed between F1 (continuous professional development) and F2 (Continuous assessment). This result indicated that continuous professional development would affect positively the continuous assessment process in the classroom. A high correlation coefficient (0.567) was observed between F3 (Mentoring) and F4 (professional development day), between mentoring and professional development day, and between F2 (Continuous assessment) & F4 (professional development day). This result showed professional development day would make continuous assessment more effective. A low correlation coefficient (0.392) was observed between F1 (continuous professional development) and F3 (mentoring). This result indicated that continuous professional development would result in effective mentoring. A low correlation coefficient (0.367) was observed between F1 (continuous professional development) F4 (professional development day). This result

showed professional development day would make continuous professional development more effective. Table 06 showed the intercorrelations among all the four factors were positive. All the correlations were between 0.36 to 0.61 which was indicated that there was internal consistency between different factors or components of the scale. It was inferred that the instrument was valid as elements in it were closely and positively interrelated with one another and the research tool fulfills the objectives of the study.

Inferential Statistics

Table 7: Significance of difference between factors (Gender)

Gender	Sample size	Mean	S.D	Value of z-test (Calculated)
Female	126	165.67	25.03	2.6
Male	197	158.81	20.04	

Table no 07 indicated that the calculated value (2.60) is more than the table value at 0.05 (1.96) level of significance. It means that the difference in responses between males and females is statistically significant. Moreover, the difference between a means shows the better attitude of female teachers.

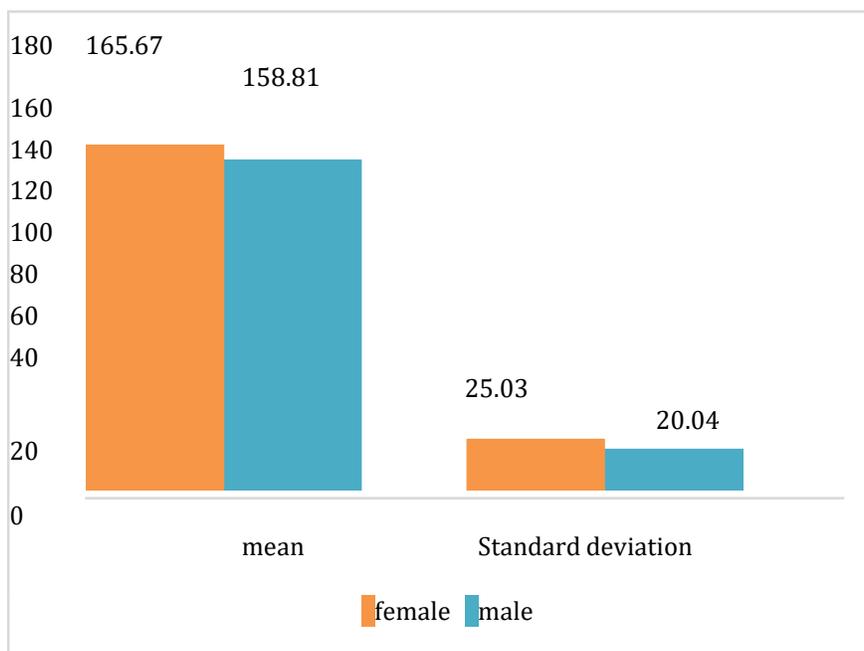


Figure 2. Significance of difference between factors (Gender)

Table 8. Significance of difference between factor (rural and urban)

Area	Sample size	Mean	S.D	Value of z-test(Calculated)
Urban	134	160.67	25.75	0.76
Rural	189	169.14	19.92	

Table no 08 indicated that the calculated value (0.76) which is less than the table value at 0.05 (1.96) level of significance. It means that difference of responses between rural and urban is statistically insignificant. Moreover, the difference, between means shows the better attitude of urban teachers.

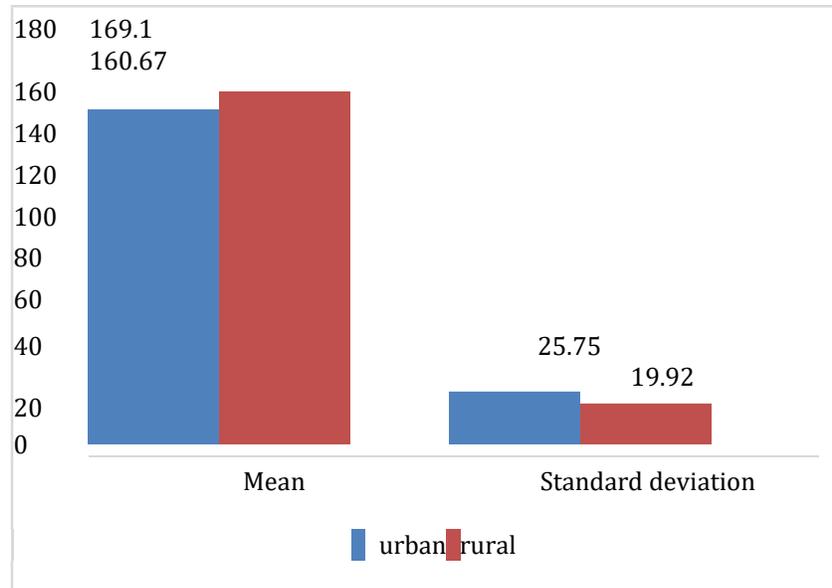


Figure 3. Significance of difference between factor (rural and urban)

Table 9. Significance of the difference between factors (age, teaching experience, teachers qualification)

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
Age	Between Groups	3536	2	1768	3.10	0.046
	Within Groups	182441	322	570		
Teacher experience	Between Groups	1105	2	552	0.96	0.385
	Within Groups	184872	322	578		
Teacher qualification	Between Groups		2	280	0.48	0.618
	Within Groups	185418	322	579		

There is a significant difference between the performances of persons with different age groups because C.V (3.10) was more than the table value (0.046) and between the performances of persons with different teaching experiences because C.V (0.96) was more than the table value (0.385). There is no significant difference between the performances of persons with different qualifications because C.V (0.48) was less than the table value (0.618).

CONCLUSIONS

Conclusions were drawn from the findings of the study and presented in the following form.

- Continuous professional development fulfilled the academic need of respondents and helped them in gaining new information and skills and to conduct a formative evaluation plan in their classroom.
- Continuous professional development identified teaching resources for respondents and it also motivated them to perform their job more effectively. Teachers gained subject mastery with the help of continuous professional development.
- Due to the continuous professional development teaching skills of primary teachers improved and they also learned effective use of A.V aids in their classroom.
- It developed better cooperation among primary school teachers. It improved the overall performance of the teachers in their classrooms. Assessment skills and interaction skills improved due to continuous professional development.
- Continuous assessment assisted teachers during their learning process and helped teachers to identify the strengths and weaknesses of learners and also determined the learners' progress.

- Continuous assessment improved the student's overall performance as well as the learning skills of students. It improved the overall quality of the education system.
- Teachers were satisfied with the criteria of the marking scheme and they considered that it was reliable for the assessment of their students.
- Mentor was trained in pedagogical skills and an expert in his field of knowledge and helped teachers for their professional growth and to identify their classroom problems.
- Professional development day was beneficial for respondents. They learned how to develop low-cost A.V aids from their mentor. Materials that were provided by DSD for Continuous professional development was helpful for respondents in their teaching.
- Mentoring activity developed reflective thinking among respondents. It also improved their teaching efficiency and developed confidence among them.
- The mentor's attitude was not sympathetic and kind. He did not create a comfortable and supportive environment for the professional development of the respondents and was not a role model for PST's.
- Continuous assessment was a burden on primary school teachers. It was a wastage of time during their teaching sessions and students did not actively participate in the learning process.
- Continuous professional development did not develop reflective thinking among respondents. It did not provide career opportunities to respondents.

RECOMMENDATIONS

Recommendations related to the problem of the study were,

- The quality of continuous professional development should be raised to meet the career opportunities.
- Continuous professional development should develop better interaction between students and teachers.
- Teachers should be professionally trained during their vacations. Reflective practice should be included in professional development activities.
- Continuous assessment should be included to improve the learning skills of students.
- Activities of continuous assessment should be conducted in such a way that may enhance student participation.
- Directorates of staff development should give free visual aids to primary school teachers according to their needs. More supporting material and resources should be provided so that they can teach more efficiently in their classroom.

REFERENCES

- Agochiya, D.(2001).*Every Trainers Handbook*.New Delhi: Sage publications.
- Ahuja, A. (2015). Professional development of teachers. *Educational Quest-an International Journal of Education and Applied Social Sciences*, 6(1), 11-15.
- Al Asmari, A. (2016). Continuous Professional Development of English Language Teachers: Perception and Practices. *Advances in Language and Literary Studies*, 7(3), 117-124.
- Angrist, J. D., & Lavy, V. (2001). Does teacher training affect pupil learning? Evidence from matched comparisons in Jerusalem public schools. *Journal of labor economics*, 19(2), 343-369.
- Bolam, R., & Weindling, D. (2006). Synthesis of research and evaluation projects concerned with capacity-building through teachers' professional development. *London: GTC*.
- Cornell,C.(2003).How Mentor Teachers' Perceive their Roles and Relationships in the Field Based Teacher Craft, A. (2002). *Continuing professional development: A practical guide for teachers and schools*. Routledge.
- David, M. N., & Bwisa, H. M. (2013). Factors influencing teachers' active involvement in continuous professional development: A survey in Trans Nzoia West District, Kenya. *International Journal of Academic Research in Business and Social Sciences*, 3(5), 224.
- DSD .(2007a).Guide for Cluster Training and Support Center.Lahore,DSD.
- DSD .(2007b). *Continuous Professional Development Frame work for Primary Teacher*.Lahore,DSD.
- DSD.(2007c).*Training of District Teacher Educators*.Lahore,DSD
- Edwards, E. (2016). The impact of action research on teachers' continuous professional development. *ELT Research*, 31, 3-5.
- Friedman, A., Davis,K., and Phillips, M.(2000). *Continuing Professional Development in VK: Policies and programs, & Bristol*, PARN.
- Ganser, T. (2000). An ambitious vision of Professional Development for teachers. Gn:NASSP Bullentin,84(618), 6 – 12
- Gartia, R., & Sharma, S. (2013). Continuous professional development: a panacea for teachers. *International Journal of Research Pedagogy and Technology in Education and Movement Sciences*, 2(01).
- Gray, S.L. (2005). *An Enquiry into using Professional Development for Teachers*. London: Esnee Farbrain Foundation:
- Herbert, S., & Rainford, M. (2014). Developing a model for continuous professional development by action research. *Professional development in education*, 40(2), 243-264.
- Hoban, G.F. (2002). *Teacher Learning for Educational Change*. Buckingham: Open University Press.
- Inquiry group. *Journal of Teachers Education*, 54 (5), 386-398.
- Khan, A. N., & Khan, I. A. (2014). Academic role of a principal and continuous professional development. *Journal of Education and Human Development*, 3(2), 925-942.
- Luneta, K. (2012). Designing continuous professional development programmes for teachers: A literature review. *Africa Education Review*, 9(2), 360-379.
- McArdle, K., & Coutts, N. (2010). Taking teachers' continuous professional development (CPD) beyond reflection: Adding shared sense-making and collaborative engagement for professional renewal. *Studies in continuing education*, 32(3), 201-215.
- Memon,M.A.(2007).Professional Development of Teachers at Higher Education Institution in Pakistan:Some alternatives,Paper Presented at national conference on professional development of teachers in higher education in Pakistan,islambad:Pakistan,16-18 january,pp104-111.
- Nieto, S. (2003). Challenging current notions of 'Highly Qualified Teachers' through working a teachers' Purdon, A. (2003). A national framework of CPD: continuing professional development or continuing policy dominance? *Journal of Education Policy*, 18(4), 423-437.
- Rhodes, C. & Beneicke, S. (2002) .Coaching, Mentoring and Peer-networking: Challenges for the Management of Teacher Professional Development in schools, *Journal of In-serve Education*, 28, 297-309.
- Training Program.*Education*,24(2),401-411.
- Wabule, A. (2016). Continuous professional development: What role and who benefits? Reflections on teacher development in Uganda. *Africa Education Review*, 13(3-4), 141-156.