

Practice and Challenges of Teachers' and Leaders' In Implementing CPD in Primary Schools: The Case of Somali Regional State, Fafan Zone Ethiopia

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Abstract:- Currently, in the educational system from teacher-centred to learner centred (active learning) in learning-teaching process is on the way to new change. To accustom with the new methodology, the issue of continuous professional development (CPD) has been addressed to maintain the quality of education through updating and upgrading teachers and school leaders. This study is therefore, aimed at investigating how primary school teachers and leaders have perceived continuous professional development, to what extent CPD of teachers and leaders contribute to enhance quality of teaching-learning, and finding out the major problems encountered during its implementation in primary schools. The subjects of this study were primary school teachers and leaders from purposively selected 15 linkage primary schools of Fafan Zone, Somali Region of Ethiopia. A total of 75 teachers, 30 principals and 15 CPD leaders are selected from the schools so that the sample size is fixed to 120. The research design employed in the study was descriptive survey. The research method utilized was both quantitative and qualitative ways to address the issue raised.

The data collecting tools were questionnaire, informal interviews and focus group discussion. The data were analyzed using methods of descriptive statistics (frequencies and percentages) and inferential statistic (correlation and regression analysis). The multiple linear regression model results revealed that the frequency of continuous professional development implementation practises was determined by various factors. Age, teaching experience, job satisfaction, and principal experience had a significant influence on frequency of continuous professional development implementation practises (participation) in the primary schools, whereas gender, class size, attitude to students, work environment, and school facilities did not significantly affect the frequency of continuous

professional development implementation practises in LPSs.

With regard to the perception, the results revealed that most primary school teachers and leaders viewed continuous professional development as a program which is beyond in-service program though they do not participated in a variety of CPD programs that update and upgraded their profession. Moreover, the findings indicated that continuous professional development has not been fully implemented in primary schools yet as desired. It was then concluded that even though a considerable proportion of primary school teachers have a clear concept of continuous professional development program, but there is remaining works to be done so that schools benefits the maximum output of CPD program to play a role in maintaining quality education. To overcome this, it was suggested that encourage NQTs to participate in schools induction /CPD programs, providing sufficient materials, minimizing workloads of teachers participating in CPD, and assigning experienced individuals in any leadership posts of schools.

Keywords:- Continues Professional Development (CPD), Perception, Practises/Participation, Quality-Education

I. INTRODUCTION

1.1. Background

The Transitional Government of Ethiopia (TGE) introduced the Education and Training Policy (ETP) in 1994, in a major initiative to address problems related to access, equity, and quality of educational provision. The ETP, supported by articles in the Ethiopian constitution, sought to decentralize educational authority to the 9 regional states and 2 City Administrative Councils and called for new paradigms of education based on relevant, active, and student-centred teaching and learning. The ETP established the foundation for all subsequent strategies,

guidelines and programs. In connection to this, changes in the educational system of a nation and global requirements demand staff development activities.

The Education Sector Development Program translates the policy statement into action, for the last 25 years. The Education Sector Development Programs I, II, III, IV and V which were developed in 1997, 2002, 2005, 2010 and 2015 respectively. And planned in line with the goals of creating, "trained and skilled human power at all levels who will be driving forces in the promotion of democracy and development in the country" (MoE, 2005, p. 5). With rapid quantitative expansion, attention has increasingly been directed toward the issue of quality through improving curricula, providing textbooks, increasing community participation, and augmenting financing for education are among the strategies pursued to address the perceived decline in the quality of education. Moreover, while all policy documents stress the importance of teachers for promoting learning, the emphasis on improving teacher quality is most prominent in the Education Sector Development Program (MoE, 2005).

According to MoE (2005) in Ethiopia the following points were stated clearly: (1) compulsory requirement for those who teach in all educational establishments, (2) CPD is the civic and professional duty of all educators, (3) All schools are required to produce school improvement plans in order to improve the quality of teaching and learning, (4) CPD is an essential part of school improvement which is divided into four domains. These domains are: learning and teaching, student environment, leadership and environment, and community involvement (5) each institution must have a CPD plan which outlines the CPD priorities for the year.

Professional development consists of all natural learning experiences and those conscious and planned activities which are intended to be of direct or indirect benefit to the individual, group or school, which constitute, 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 throughout each phase of their teaching lives (Day 1999b).

School based CPD is a lifelong education in which teachers not only learn themselves but also teach each other to update and add value their profession. The ultimate goal of CPD is to enable the students to get quality education. This motto necessitates the involvement and active participation of teachers in the CPD. The effective participation of teachers in the program is expressed and witnessed by the reflected and exhibited changes of the teacher in teaching learning and professional ethics. These teachers' efficiencies enable them to benefit from acceptable, attractive and realistic career structure. Thus, teachers are

licensed to proceed in the profession on the basis of their professional competence (AREB, 2009).

In addition, according to the national strategy of the Ministry of Education (MOE, 2009), CPD program is intended to all school teachers, leaders and supervisors in all Regions of Ethiopia to participate in high quality and appropriate CPD which positively impacts classroom practices to ensure improved learning. By and large, it allows all teachers to improve their knowledge, skill and attitudes in order that they become more effective classroom practitioners and contribute meaningfully to community development. The grand ambition of teachers' development program is also proclaimed in the Blue Print of the Ministry of Education issued in 2006/7.

The MOE ESDP, CPD documents and research papers, stated about importance of CPD to enhance quality of education. This study is intended to examine and analyze how do teachers and leaders perceive CPD?, to what extent CPD contributes to their delivery service in the education system? And what are the possible bottlenecks that hinder implementation of CPD in 15 distinct primary schools at Fafan Zone of Somali Regional State.

1.2. Statements of the problem

In Ethiopia continuous professional development can be placed into two categories (MoE, 2009b): Updating is a continuous process in which every professional teacher participates during their career as a teacher. It focuses on subject knowledge and pedagogy to improve classroom practice, and Upgrading is the process by which teachers can choose to participate in additional study outside their regular work as teachers at appropriate times in their career, for instance, convert a certificate diploma to a diploma of the first degree or first degree to master's degree.

Professional development is acknowledged to be centrally important in maintaining and enhancing the quality of teaching and learning in schools (Craft 2000; Harland and Kinder 1997; Harris 2002). The international research literature has consistently shown that professional development is an essential component of successful school level change and development (Day 1999b; Hargreaves 1994).

According to Day (1999), School based teachers' continuous professional development is also be all informal learning experiences in a school and those conscious and planned activities which are intended to be of direct or indirect benefit to the individual, group or school, which contribute to the quality of education in the classroom. It is the process by which teachers alone and with others, 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 throughout each phase of their teaching lives.

CPD is increasingly seen, then, as a key part of the career development of all professionals which is a shared responsibility with their employers because it serves the interests of both. The concept is often left ill-defined being in many cases conflated with the related concepts of in-service training and on the job learning. Both are more limited than CPD, as CPD can encompass a wide variety of approaches and teaching and learning styles in a variety of settings (inside or outside of the workplace). It is distinguishable from the broader concept of lifelong learning, which can include all sorts of learning. It is seen primarily as being related to people's professional identities and roles and the goals of the organisation they are working for (Galloway 2000).

Furthermore researches call attention to that, School based CPD is a continuous process of acquiring new knowledge and skills throughout teachers' professional life. Since higher institutions' education is insufficient to ensure lifelong professional competencies, it is essential to sustain the quality of teachers, to remedy gaps in skills, and to enable professionals to respond to the challenges of rapidly growing knowledge and technologies, changing education needs and the social, political and economic demand of the ongoing situation (Robert, 1987). According to the views of Villegas-Reamers (2003), teachers' development is the professional growth a teacher achieved as a result of increased experience through systematic examination of his or her teaching practice.

However, no empirical studies have been conducted so far as to how teachers and leaders perceive on CDP, to what extent CPD of teachers and leaders contribute to enhance quality of teaching-learning and what factors are influencing implementing continuous professional development at primary schools in Fafan Zone of Somali Regional State. Considering this research gap, it is important, therefore, on the part of the investigator to look into this problem in the case of Teachers and leaders at primary school levels.

To this end, the following research questions are proposed.

Research questions:

- What are the challenges that affect teachers and leaders CPD implementations at school level?
- What are the practical strategies to alleviate challenges in CPD implementation?

1.3. Objectives of the study

1.3.1. General Objectives

This study is aimed at investigating the perception of primary school teachers and leaders on CPD and challenges that influence implementing CPD in primary schools.

1.3.2. Specific objectives

- To analyze perceptions of primary school teachers and leaders on CPD;
- To identify challenges that influence implementing CPD in primary schools.
- To identify the practical strategies to alleviate challenges in CPD implementation

1.4. Significance of the study

All educational researches conducted are expected to meet certain values in one way or another. Therefore, the findings of this study will be significant to primary schools for it will improve their practice on implementation of continuous professional development. It is also important to policy makers and practitioners to be aware of the challenges that primary schools are facing in implementing continuous professional development at each school level in such a way that it will give useful exposures to incorporate suitable findings in updating CPD guideline. Moreover, the finding would be significant for other researchers who would be initiated to undertake further research in the area at national level. Therefore, it may serve as a stepping stone for further studies.

1.5. Limitation of the Study

Continuous professional development is a relatively new concept in Ethiopia. Thus, locally written literature specifically on perception of teachers and school leaders on CPD is scarcely available. This limited the researcher not to supplement the study with literature reviewed on Ethiopian context. Since the study was confined to schools in Somali region, Fafan zone, due to limitations of time and resources, generalization might not be possible in the national context.

1.6. Conceptual Frame Work

Based on the literature review and discussion with experts frequency of CPD participation will be studied by adopting a multiple perspective, which implies investigating the Teacher effectiveness factors, School effectiveness factors and Teaching effectiveness factors that might influence the implementation of CPD in terms of frequency of participation. Therefore, this conceptual framework recognizes factors that intervene in the extent of CPD implementation/participation.

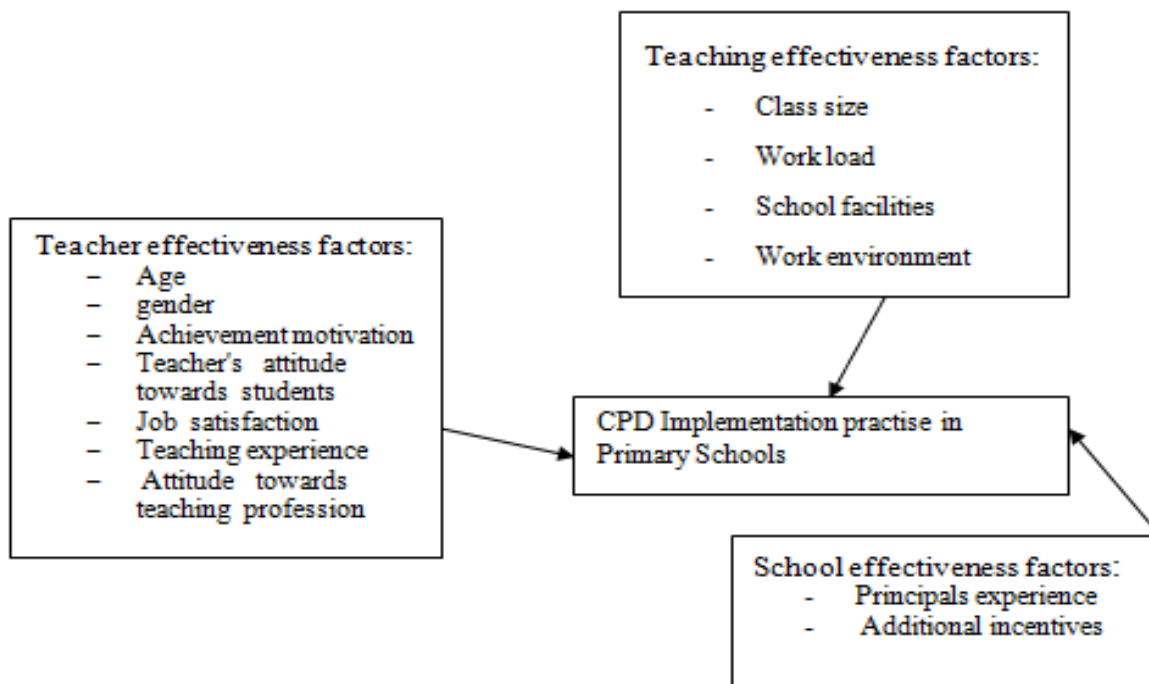


Figure-1. Conceptual and analytical framework
(Source: A recent OECD, 2010 report)

II. RESEARCH METHODOLOGY

This part starts by presenting the research design, details of the methodology followed to conduct the survey such as the sampling procedure, data types, sources of data, method of data collection and method of data analysis.

2.1. Research Design

This study investigated primary school teachers' and leaders' perception of continuous professional development, how it was being implemented and the main challenges encountered during the implementation.

- | | | | |
|--|--|--|--|
| 1. Jijiga Counsel
Dude- Hida
W/waal
Wanow
H/Girrey
A/Gurey | 2. Jijiga Woreda
Hadew
Elbahye
Dhiba
Bundada
Qabri-Axmed | 3. Qabri-Beya
Dr. Abdulmejid | 4. Tulu gulied
Tulu (Tuli)
Hagajin-Libah
Sh. Madow
Dhux-Lelay |
|--|--|--|--|

2.3. Sampling Procedure

The study locations were selected purposively and include Jig-jiga Council, Jig-jiga Woreda, Qabri-Baya Woreda and Tuli-Gulied Woreda of Somali Region. Teachers, CPD leaders, School leaders(principals) in the selected primary schools are the sampling frame considered for this investigation. They included all government primary schools from Jig-jiga Council (5 with 10 principals, 5 CPD leaders, 25 teachers), Jig-jiga Woreda (5 with 10 principals, 5 CPD leaders, 25 teachers), Qabri-Baya Woreda (1 with 2 principals, 1CPD leaders, 5 teachers) and Tuli-Gulied Woreda (4 with 8 principals, 4 CPD leaders, 20 teachers) purposively are included in

In educational research, there are two cluster methodological approaches employed: qualitative and quantitative (Wellington, 1996, cited in Tefera, 2005). The study utilizes both qualitative and quantitative ways of researching an issue.

2.2. Study Areas

The study was conducted at one Council and three Woredas of Fafan zone in Somali Regional State. 15 distinct primary-schools, linkage primary schools of Dr. Abdulmejid Hussein College of Teachers Education, are purposively selected for this study. Name of schools are indicated in respective of their counsel and woreda as follows.

this study respectively. It means from each school 2 principals, 5 teachers and 1 CPD leader are purposively selected. A total of 75 teachers, 30 principals and 15 CPD leaders are selected from the schools so that the sample size is fixed to 120.

2.4. Types of Data

Both quantitative as well as qualitative data were collected and analyzed to fulfil the objectives of the study. Primary data were generated from the respondents of the study, while secondary data were gathered from documents, reports and other evidences from schools and other institutions.

2.5. Method of Data Collection

The quantitative data in relation to the objectives and variables selected for the study were generated through questionnaires. The questionnaire was triangulated and enriched through informal interviews and focused group discussions. The questionnaire was developed as structured, which was pre tested using adequate number of non-sample respondents. Checklists are used for informal interview and focused group discussions.

2.6. Pilot study

A pilot study (questionnaire pre-test) was conducted before the questionnaires will be administered. The main objective of this pilot study was to make some modification on the questionnaires based on the responses of the pilot sample. This was done using adequate number of non-sample respondents involving 26 teachers who are not included in the actual data collection. Based on the results from this test, some modifications were made on the questionnaire.

2.7. Methods of Data Analysis

The qualitative data were described and interpreted to supplement the quantitative data. The quantitative data were coded, tabulated and analyzed using descriptive statistics such as frequencies and percentages while statistical tools such as chi-square and Pearson's Product Moment correlation were used to find out the association and the relationship between the dependent variable and the selected independent variables respectively. To see the extent of influence of the independent variables (factors) on the dependent variable, Multiple Linear Regression (MLR) model was employed.

Multiple Linear Regressions

The existence of a significantly high correlation between two variables tells us nothing about why the correlation exists. Particularly, the correlation does not tell us that one variable is the cause and the other effect (Brown and Starr, 1983). MLR analysis is a statistical technique that can be used to analyze the relationship between a single dependent variable and several independent variables with the object of using the independent variables whose values are known to predict (Hair *et al*, 1998).

According to Brown and Starr (1983), the regression equation takes the form:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + \dots + b_nX_n$$

Where:

- Y = Dependent variable
- X = Independent variable
- a = y intercept
- b = the slope of the line

III. RESULTS AND DISCUSSIONS

This chapter presents and the interpretation of data and the major findings of the study under the following sections: section one briefly presents overview of the characteristics of respondents (teachers and leaders), while section two discuss analysis of the main data, finally, section three focuses on discussion of the major results. As illustrated in the materials and methods part, to obtain accurate data about a given population it is obvious that using census is better. But, due to many constraints the researcher used to relatively small units in the place of the population and would obtain data that are representative of the whole population from Fafan Zone primary schools by using systematic sampling and available sampling techniques to selected sample of teachers, CPD leaders and principals respectively. As a result of this, 75 teachers, 15 CPD leaders and 30 principals a total of 120 would be taken as samples of the population. Out of 75 teachers 65 (86.67%) were returned the questionnaires and 10(13.23%) were not returned at all, and from 45 CPD leaders and principals 30 (66.67%) questionnaires returned, 33.33% did not respond.

3.1. General Characteristics of Respondents

Before discussing on the data related to the major questions, a summary of characteristics of sampled respondents is presented here. As mentioned in chapter three, the intended information for this study has been gathered from two groups; namely, primary school teachers and leaders in 15 Linkage primary schools at Fafan zone. From total of 120 respondents 95 were returned the questionnaires and included in the study, 65 of them were teachers and 30 of them were school leaders of the 15 LPSs. Table-1 below summarize respondent teachers characteristics in respective of sex, age, marital status and educational qualification.

Table-1: Respondent teachers' characteristics

Variable; Total N=65	Category	F	%
Sex	M	57	87.7
	F	8	12.3
Age	20-29	8	12.3
	30-39	40	61.5
	40-49	17	26.2
Marital status	Single	5	7.7
	Married	49	75.4
	Separated	11	16.9
Education Qualification	Diploma	49	75.4
	Degree	15	23.1
	Master	1	1.5

3.2. Perception of Teachers on CPD

The data obtained from the questionnaire using three-point continuum item scale for perception are presented in Table 2. Here an attempt was made to see whether primary school Teachers in the study areas have clear understanding about CPD or not.

Table-2: Summary of perception of primary school teachers on CPD (N=65)

S/N	Item	Response					
		Agree		Undecided		Disagree	
		F	%	f	%	F	%
1.	X ₁	41	61.5	24	35.8	-	-
2.	X ₂	28	44.8	12	17.9	25	37.5
3.	X ₃	30	44.8	-	-	35	52.2
4.	X ₄	32	47.8	26	38.8	7	10.4
5.	X ₅	27	40.3	22	32.8	16	23.9
6.	X ₆	30	44.8	35	52.8	-	-
7.	X ₇	30	44.8	35	52.8	-	-
8.	X ₈	26	38.8	19	28.4	20	29.9
9.	X ₉	35	52.2	30	44.8	-	-
10.	X ₁₀	39	58.2	26	38.8		

Here after we see the analysis part of each item in table-2 above as of the response given by primary school teachers which were included in the research.

Item X₁: I am aware the CPD program running in the school. As indicated in table-2 for this statement 61.5% of primary school teachers were aware the CPD program in their schools, but 35.8% of school teachers were neither aware nor unaware about CPD program in their respective schools.

Item X₂: I have participated in different CPD workshops, seminars, forums... at school, regional or national level. As the result obtained for item X₂ 44.8% agreed participated on different CPD training workshops, seminars and extra; 17.9% undecided where as 25% of the respondents didn't agree they had participated on CPD related workshops, seminars and extra.

Item X₃: I have my own CPD plan annually. As the result shown for this statement (table-2), 44.8% school teachers have their own CPD plan in the contrary more teachers have no CPD plan, 52.2%.

Item X₄: I believe CPD programs contributed to update my pedagogical knowledge and skills.

As depicted in table-2 for item-4, 47.8% agreed participation on different CPD training workshops, seminars and extra improved their pedagogical knowledge and skills; 38.8% undecided where as 10.4% of the respondents didn't agree their participation on CPD related workshops, seminars and extra benefited them to enhance the pedagogical knowledge and skills.

Perception of CPD by some school leaders:

They said, "CPD is important to all school principals and teachers to develop their professional knowledge and skills. CPD enhances performance of teachers. For instance, CPD trainings helped us to enhance our relationship with school parents (community members). In general, it's a program intended to share experiences among teachers throughout their working carrier. "

(Leaders in Primary schools cluster)

Item X₅: I feel CPD participation enhanced my classroom teaching-learning practises.

As of the result for this item in table-2, 40.3% of the respondents agreed the participation in CPD enhanced their classroom practises whereas 23.9% disagree with the statement and 32.8% undecided about it.

Item X₆: I usually take to classes the new knowledge, skills and experiences to classes after participation in CPD.

As the result (table-2) for item-6, 52.2% of the respondents took the new knowledge, skills and experiences to classes after participation in CPD, but 44.8% of them undecided.

Item X₇: I assess the impact on students learning outcome after CPD participation.

As depicted in table-2 above, for the item-7 52.2% of the respondents made impact assessment on students learning outcome after CPD participation, but 44.8% of the respondents were undecided.

Item X₈: I noticed students learning outcome increment due to CPD impact.

As the result for this item (table-2), the subjects of this study figure 28.4% agreed they observed learning progress on students learning, but 29.9% of the respondents disagree. Whereas, the respondents figure 38.8% were undecided.

Item X₉: I believe CPD programs helped me to be aware of personal needs, policy needs, and school needs. And meet too.

As the result (table-2) for item-9, 52.2% of the respondents believed CPD programs helped them to be aware of personal needs, policy needs, and school needs. And meet too, but 44.8% of them undecided.

Item X₁₀: I acknowledge CPD is of great importance in the life of schools, contributing to professional and personal development for staff and to improvement in teaching and learning, in general.

As the result of the last not least item-10(table-2), 58.2% of the respondents acknowledged CPD is of great importance in the life of schools, contributing to professional and personal development for staff and to improvement in teaching and learning, in general. But, the Respondents tool 38.8% undecided about this statement.

3.3 Perceptions of school leaders about CPD from the FGD

Here, school leaders are principals, supervisors and CPD focal persons in primary schools which were included purposively for this research in the focus group discussion (FGD).

3.4 The Extent of CPD Participation on CPD implementation practise in LPSs

Teachers were asked for how many days they had participated in any training, workshops, seminars or forums related to their professional development per annum. Accordingly, their responses have categorized in four ranges and presented as shown in table-3 below (As of Question 7b (Q7b) in the questionnaire for teachers appendix-)

Table-3: LPSs Teachers’ participation

S.N	No. days	F	%
1.	0 -1, none/low	20	30.77
2.	2-5, medium	20	30.77
3.	6-10, high	16	24.61
4.	> 10, v.high	09	13.85
	Total	65	100.00

As can be observed from table-3 above, 30.77% of respondents participated in none or little trainings related to any professional development per one academic year. But, 69.29% of the respondents had made participation in CPD trainings which were implemented by linkage primary

Age group

Table-4: Age Vs participation of teachers in CPD

Age Category	Frequency of CPD participation of teachers								χ^2	R
	Low (0-1)		Medium(2-5)		High(6-10)		V.high (> 10)			
	F	%	F	%	F	%	F	%		
20-29, N= 8	4	50	3	37.5	1	12.5	-	-	12.375* 0.155	
30-39, N=40	8	20	10	25	13	32.5	9	22.5		
> 40, N=17	8	47.06	7	41.18	2	11.76				

* Significance level=0.001,

In line with international literature which identifies age as a determinant of CPD participation (Richter et al., 2010; Desimone, Smith and Ueno, 2006), findings in this study show some differences in the participation on CPD by age group. Participation is most common amongst teachers aged between 30 and 39 years (Table-4). Participation on CPD

slowly decreases from this point onwards throughout the teaching career. Moreover, teachers in the early part of their career are most likely to participate in none or very low amounts (1 day) of CPD. 50% of 20-29 year participates in ‘none or low’ amounts of CPD compared to 20% teachers aged 30-39.

Gender

Table-5: Gender Vs participation of teachers in CPD

gender Category	Frequency of CPD participation of teachers								χ^2	R
	Low (0-1)		Medium(2-5)		High(6-10)		V.high (> 10)			
	f	%	F	%	f	%	f	%		
Female, N= 8	2	25	2	25	3	37.5	1	12.5	2.013(NS) 0.140	
Male, N=57	18	31.58	18	31.58	13	22.0	8	14.4		

P=0.366. NS (no significance)

No major pattern emerges when we examine the participation on CPD by gender (Table-5). Males are slightly more likely (31.58% compared to 25%) to have participated in very little (‘none or low’) CPD. Moreover, females are slightly more likely (31.58% compared to 25%) to have participated in a ‘high’ (between 6 and 10 days) amount of CPD days. But as the result in table-5, there is no significance relation frequency of CPD participation of teachers with gender.

Teachers’ Attitude to students’

The association of teachers' attitude towards their students with frequency on CPD participation is presented in Table-6 below. The table is categorized based on point scored by respondents on Q-11 of teacher- self questionnaire. Point 15-20 favourable, point 11-14 neutral, and point 5-10 unfavourable as shown below.

Table-6: Attitude towards students Vs participation of teachers in CPD

Teachers attitude to students	Frequency of CPD participation of teachers								χ^2	R
	Low (0-1)		Medium		High(6-10)		V.high			
	f	%	F	%	f	%	F	%		
Favorable, N=18	7	38.9	5	27.8	4	22.2	2	11.1	0.291(NS) 0.059	
Neutral, N=36	13	36.1	10	27.8	6	16.7	7	19.4		
Unfavorable, N=11	2	18.2	5	45.5	3	27.3	1	9.1		

P=0.366. NS (no significance)

The results in Table -6 indicate that, there is no significant relation between teachers' attitude towards students and frequency of CPD participation. Those teachers

with favourable and unfavourable attitude to their students have no difference in their rate of CPD Participation.

Teaching experience

Table-7: Teaching experience Vs participation of teachers in CPD

Teaching experience	Frequency of CPD participation of teachers								χ^2	R
	Low (0-1)		Medium(2-5)		High(6-10)		V.high (> 10)			
	f	%	F	%	f	%	F	%		
Low, N=13	8	61.54	5	38.46	-	-	-	-	4.328* 0.208	
Medium, 35	2	5.7	4	11.4	16	45.7	13	37.1		
High, 17	7	41.2	4	23.5	4	23.5	2	11.8		

P=0.037, * significance level=0.01

Findings also show that teaching experience at primary school level impacts on teacher participation on CPD. Not surprisingly, those with less than one year's teaching experience are least likely to participate in CPD (table-7). Participation on CPD increases gradually with teaching experience with just under half of those with fifteen or more years' teaching experience participating in over six days' CPD in the previous year. These ties in with the previous

findings relating to age where teachers in the 30-39 age bracket were most likely to participate in CPD. It can be assumed that many of those with over fifteen years' experience fall within this group.

Job satisfaction

The association of job satisfaction with frequency of CPD participation is presented in Table 8 below.

Table-8: Job satisfaction Vs participation of teachers in CPD

Job satisfaction	Frequency of CPD participation of teachers								χ^2	R
	Low (0-1)		Medium(2-5)		High(6-10)		V.high (> 10)			
	F	%	f	%	f	%	F	%		
Low, N= 52	20	57.7	16	23.1	12	15.4	4	3.8	4.720* 0.190	
Medium, N=8	-	-	4	50	2	25	2	25		
High, N=5	-	-	-	-	2	40	3	60		

p=0.094 *significant at 10% level

As indicated in Table-8, positive (r=0.190) and significant association is found between teachers job satisfaction and frequency of CPD participation at 10% level. Furthermore, 80%

possible to deduce that a teacher who has satisfaction by his/her teaching can fully participate on CPD activities in school.

Class size

The association of class size (the number of students in a class) with the frequency of CPD participation is presented in Table 9 below.

Table-9: Class size Vs participation of teachers in CPD

Class size	Frequency of CPD participation of teachers								χ^2	R
	Low (0-1)		Medium(2-5)		High(6-10)		V.high (> 10)			
	F	%	F	%	F	%	f	%		
< 50, N= 8	-	-	2	25	5	62.5	1	12.5	1.697(NS) 0.127	
50-100, N=19	9	47.36	8	42.11	2	10.53	-	-		
> 100, N=38	11	28.95	10	26.32	9	23.68	8	21.05		

p= 0.428, NS (non significant)

Considering class size, the result depicted in the above Table shows as, 58.5% (n=38) of the respondents agreed that in a single class there are more than 100 students and 12.3% (n=8) respondents agreed their class size is less than 50 students per class. In terms of class size teachers’

participation on CPD has no significance relation at 10% level.

Workload

The influence of teaching load on the frequency of CPD participation practice is presented in Table 10 below.

Table-10: Workload Vs participation of teachers in CPD

Workload	Frequency of CPD participation of teachers								χ^2	R
	Low (0-1)		Medium(2-5)		High(6-10)		V.high (> 10)			
	F	%	F	%	F	%	f	%		
< 15, N= 6	3	50	2	33.33	1	16.67	-	-	4.615**	-0.215
15-25, N=55	15	27.27	16	29.09	15	27.27	9	16.36		
> 25, N=4	2	25	2	25	-	-	-	-		

P=0.032, ** significance level=0.05

With regard to workload, most of the respondent teachers 84.6% (n=55) responded that they were teaching 15-25 periods per week. About 9.2% (n=6) of the teachers replied that they were teaching below 15 periods per week. The remaining 6.2% (n=4) of them were teaching above 25 periods per week. According to the MOE (1995, cited in Mamuye, 2007) stated that, the current period allotted for each teacher at primary school level to be 32 periods per week. From this, one can conclude that most of the teachers in the selected study locations are not overloaded.

But, the result presented in Table-10 also indicates that, significant association was found between workload and frequency of CPD participation (when workload increase teachers participation on CPD decreases, inverse relationships).

School facilities

Table-11 presents the association of unavailability of teaching resources with frequency of CPD participation in implementation practise of LPSs.

Table-11: School facilities Vs participation of teachers in CPD

School facilities	Frequency of CPD participation of teachers								χ^2	R
	Low (0-1)		Medium(2-5)		High(6-10)		V.high			
	F	%	F	%	f	%	f	%		
No, N= 57	20	35.1	16	28.1	14	25.5	7	12.3	1.111(NS)	-0.100
Yes, N=8	-	-	4	50	2	25	2	25		

P=0.574, NS (no significance)

Most of the respondent teachers (87.7%, n=57) responded that, they did not get the necessary material while teaching. But, school facilities have no significant association with frequency of CPD participation of teachers on CPD at 5% level and there is no relation between the two.

“CPD was understood by staff to meet a variety of needs: personal needs, policy needs and organisational needs. There were sometimes tensions between these three types of need within a school as the resources available for CPD tend to be limited.”

Work environment

The association of work environment with CPD participation is presented in Table below.

Table-12: Work environment vs participation of teachers in CPD

Work environment	Frequency of CPD participation of teachers								χ^2	R
	Low (0-1)		Medium(2-5)		High(6-10)		V.high			
	F	%	F	%	f	%	F	%		
No, N= 35	14	40	12	34.3	7	20	2	5.7	0.228(NS)	0.048
Yes, N=30	6	20	8	26.7	12	40	7	23.3		

p=0.633, NS (non significant)

The data presented in Table 12 shows most of the respondent teachers 53.85 % (n=35) do not work under favourable condition hence their rate of CPD participation is

very less. However, work environment and frequency of CPD participation do not have any significant association.

Table-13: Principals experience Vs participation of teachers in CPD

Principal age N=15	Frequency of CPD participation of teachers								χ^2	r
	Low (0-1)		Medium(2-5)		High(6-10)		V.high (> 10)			
	F	%	F	%	F	%	f	%		
30-39,	5	33.3	7	46.7	2	13.3	1	6.7	4.961*	0.135
40-49	6	30	8	40	4	20	2	10		
> 50	7	23.3	3	10	9	30	11	36.7		

P=0.084, * Significant at 10% level.

Principal experience

Some patterns emerge with the age of the principal, with older principals slightly more likely to have teachers with ‘high’ levels of CPD participation. Thirty-eight per cent of principals aged greater than 50 or over had ‘high’ or ‘very high’ levels of CPD participation among staff compared to 19 per cent of principals aged 30-39. Moreover, principals aged 40-49 appear to have the greatest number of teachers with none or low levels of CPD participation in the previous year. Furthermore, the number of years working as principal in the school appears to have some effect on the extent to which they feel teachers at the school are open to CPD participation. Principals working at the school between 6 and 10 years are more likely to state that nearly all teachers are open to CPD compared to principals working for one year or less at the school (76% compared to 68%).

3.6 Pearson's Product Moment Correlation of Dependent Variable with Independent Variables

Table 14: Relationship between dependent variable and independent variables

S/N	Variable	r-value
1.	Age	0.155*
2.	Gender	0.140
3.	Teachers attitude to students	0.208*
4.	Job satisfaction	0.190*
5.	Class size	0.127
6.	Workload	-0.215**
7.	School facilities	0.100
8.	Work environment	0.048
9.	Principal experience	0.135*

* Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

Correlations were computed to describe the relationship between respondents' overall frequency of CPD participation and selected independent variables. Based on the results of correlation coefficient, frequency of CPD participation was found to be significantly related with age, teaching experience, job satisfaction, workload and principals experience.

This correlation (positive) indicated that the frequency of CPD participation increases when these variables improves. However, in the case of workload is negative showing that the frequency of CPD participation decreases with application of this variable.

3.7 Multiple Linear Regression Analysis

Under this section, significant variables, which were hypothesized to influence frequency of participation on CPD, were identified and analyzed. The tool of analysis as mentioned earlier used was MLR model.

Estimates of the Multiple Linear Regression Model for Frequency of CPD participation

To determine the best subset of independent variables that are good predictors of the dependent variable, the MLR was estimated using SPSS.

The data in Table-15 indicates, the output of multiple linear regression model and the significance levels and relations of both categorized and continuous variables with frequency of CPD participation.

Table 15: Effect of selected independent variables on frequency of CPD participation

S/N	Variable	B	Std. error	t	Sig.
1.	Age	0.007*	0.038	-0.188	0.851
2.	Gender	0.164	0.053	3.064	0.003
3.	Teachers attitude to students	-0.286*	0.073	-3.941	0.000
4.	Job satisfaction	0.074*	0.097	0.765	0.446
5.	Class size	0.262	0.105	2.501	0.014
6.	Workload	0.028**	0.034	0.823	0.413
7.	School facilities	-0.007	0.004	-1.719	0.089
8.	Work environment	0.011	0.015	0.772	0.442
9.	Principal experience	-0.138*	0.050	-2.769	0.007
	Constant	1.391	0.158	8.778	8.778

*Sig. at 1%, ** Sig. at 5%, R=0.586, R =0.343, Adj. R =0.278, F=5.232, P=0.000

Symbols in Table-15 designate:

B: - non-standardized coefficient (intercept) of the linear equation between the dependent and independent variables.

t:-statistical test that shows significant effect of independent variable on dependent variable and relative importance of each independent variable in the model.

R² :-coefficient of determination that shows the effects of grouped independent variables on the dependent variable.

The results in the above Table indicate that, among the nine hypothesized explanatory variables, four variables were found to have significant influence on frequency of teachers CPD participation in implementation practice of CPD by LPSs. These variables include age teaching experience, workload and principals experience. Therefore, the most important predictors of frequency of CPD participation with $R = 0.343$ (34.3%) of the total variability in frequency of teachers CPD was explained by age, teaching experience, workload and principals experience. Even though these variables have their own effect on the variability of frequency of teachers CPD participation, the total effect is less and hence 65.7% of frequency of teachers CPD participation variability is explained by factors other than these ones. This is because the intercept (constant variable) ($t=8.778$) is significant at $p=0.000$ significant level.

The multiple correlation coefficient measure ($R=0.586$) indicates that the relationship between frequency of teachers CPD participation and selected explanatory variables is somewhat strong.

IV. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This part of the research presents the summary of the major findings, the conclusions drawn and recommendations forwarded by the researcher.

4.1. Summary

As stated earlier, the major purpose of this study was to find out the perception and practice of CPD by primary school teachers and leaders as well as the major problems that prevail in the implementation of CPD in selected 15 linkage primary schools at Fafan zone of Somali Regional state. An attempt was made to assess the perception of primary school teachers and leaders on CPD, how it is being practiced and major problems that school teachers and leaders possibly encountered during the implementation of CPD. To attain this, the study was made to focus on answering the basic research questions mentioned in the introduction part. Survey type of research was used in this study. Accordingly, different methods of data analysis were employed. To find out answers for the basic research questions, questionnaires were developed as the main instrument of data collection. In order to enrich the information obtained from the questionnaire, FGD and informal interview were conducted. The data obtained were analyzed using various statistical methods such as frequency, percentage, Chi-square test, correlation and multiple linear regression models.

The total number of primary school teachers and leaders involved in this study was 95, out of which 65 teachers and 30 leaders. The existence of significant association between the dependent variable and the selected independent variables were tested using Chi-square test. Age, teaching experience, job satisfaction, work load, and principals' experience were found to have significant association with the dependent variable (frequency of CPD participation). This agrees with research findings, teacher career stage emerges as a key factor influencing take-up of CPD in a number of studies (Huberman, 1989; Choy et al., 2006; Richter et al., 2010).

The variables that were significant in the Chi-square analysis were further analyzed with MLR analysis technique and the results revealed that, out of those significant variables teaching experience, job satisfaction, work load, and principals' experience had strong effect on the frequency of CPD participation.

Studies emphasise the importance of teachers feeling 'ownership over their professional development' (Loxley et al., 2010) within a positive and healthy learning environment (Bredeson and Johanson, 2000). The findings in this study show that CPD take-up is higher where there is a positive school climate and where teachers work with children who enjoy school.

As can be observed from table-3 above, 30.77% of respondents participated in none or little trainings related to any professional development per one academic year. But, 69.29% of the respondents had made participation in CPD trainings which were implemented by linkage primary schools (LPSs) from medium to very high number of training days. This result reveals that still there is remaining work to be done by LPSs so that teachers to get maximum benefit from CPD activities.

Teachers are more likely to take part in CPD when they work in school settings where pupils are more engaged in schoolwork and better behaved. Promoting a positive school climate through school development planning is likely therefore to have significant benefits not only for pupils themselves but for teacher professional development. However, it is a matter of concern that teachers who work with pupils who are disengaged from school life are less likely to take part in CPD. These teachers are the ones who are most likely to be in need of support in their day-to-day practice, especially given the consequences of a negative disciplinary climate for teacher job satisfaction and stress (Darmody and Smyth, 2011). There is a case therefore for professional development support to foster a whole-school approach in dealing with pupil behaviour. The finding that teachers with less control over their day-to-day work practices are more likely to take part in CPD appears to indicate the persistence of 'topdown' rather than teacher-led models of provision, at least in some contexts. While this approach is likely to increase the amount of CPD taken, it is unlikely to enhance professional development if teachers are not in a position to take ownership of their own development needs.

The major findings of this study were:

- A considerable number of teachers and leaders have clear understanding about Continuous professional development (CPD).
- CPD in the selected primary schools was not fully practiced. The common CPD trend was participating in workshops and short term trainings.
- Age, teaching experience, job satisfaction, work load, and principals' experience were some of the factors that hinder the proper implementation of CPD in LPSs.
- Encourage NQTs to participate in schools induction programs, providing sufficient materials, minimizing workloads of teachers participating in CPD, and assigning the right person in the right position were the solutions suggested by teachers in selected LPSs.

4.2. Conclusions

Based on the results, the following conclusions were made.

- Significant figure of primary school teachers in the study areas have clear understanding about continuous professional development.
- The existing practice is very poor. Thus, it is difficult to say continuous professional development is fully implemented in primary schools. The trend of using workshop and short term trainings as a mere mode of CPD was emphasized. This implies primary school teachers have not used the different types of CPD to enhance learning-teaching process in the selected schools, the overall quality of education. In short, teachers consider CPD is merely takes place outside the schools, they don't regard as inside schools CPD like colleagues discussion, teachers study group, base line action research group and extra as CPD.
- Many factors affect the implementation of CPD. These include: age, teaching experience, workload and principal's work experience in leading position.

4.3. Recommendations

In light of the major findings and conclusions of this study, the following recommendations are made.

- REB, Zonal Education offices or woreda Education offices must support through trainings schools' CPD and design monitoring and supporting mechanisms to support schools' CPD activities.
- Schools need material and financial support to organize discussion groups, teachers study group, base line action research group, seminars, forums, conference and extra that plays great role to enhance quality of learning-teaching in the schools, this is a reflection of teachers and leaders during the interview and the FGD.
- Schools and other concerned bodies should make maximum effort to reduce workloads of teachers so that they are encouraged to participate in updating and upgrading programs. This helps to mainstream CPD activities with regular schools schedule, but currently the activities run out of the regular schedule.
- School leaders and/or head teacher encourage NQTs to participate in schools induction programs, providing

necessary and sufficient materials, minimizing workloads of teachers participating in CPD.

- REB, Zonal Education offices or woreda Education offices assign experienced individuals to principal positions of the schools was the solutions suggested by teachers in selected LPSs.

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