Research Article

An investigation of school based continuous professional development: Perception, practices and challenges

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This paper aims to explore teachers' perceptions, practices and challenges of school-based teacher professional development program. The survey sample consisted of four secondary and preparatory schools, four school principals, four school continuous professional development (CPD) coordinators, one CPD focal person and 198 teachers. The major findings of the study were 1) there was positive perception of teachers toward school based CPD program in the study area, and 2) even though teachers have positively perceived but the practice of CPD program implementation is at low level in the sampled school. As the findings of the study confirmed, teachers' lack of support from school management and supervisors, and lack of collaboration with teachers and school leaders were among the factors that affected the implementation of CPD program in the stduyarea.The study also indicate as teachers with more teaching experience relatively positively perceive the programs and teachers with 2nd degree holders practice more CPD activities than 1st degree holders in the study area. On the basis of these results, some suggested were recommended for policy makers and future research.

Keywords: Resources; Challenges; Strategies; Curriculum; Classroom engagement

I. Introduction

Education plays key roles in development and it is the main instrument to solve economical, political and social problems of a country. In education sector, the responsible and the great assets are teachers. Giving attention and improving teachers' knowledge, skill and attitude is one way to improve the quality of education. Nowadays quality of the teaching force has become a major concern all over the world. Several studies show that there is a direct relation between the quality of education and quality of teachers (Gordon, 2004).

According to the World Bank (1991), teachers are central to the delivery of quality education. In the same way, Ethiopian government acknowledged the key roles that teachers play in the provision of quality education. Since teachers are change agents in the development of knowledge, skill, attitude and act as facilitators in preparing the young generations for different responsibilities and promoters of new technological advancements, they should develop professionally throughout their life in sustainable way.

Continuous Professional Development activities are those consist of all natural learning experiences and those conscious and planned activities which are intended to be direct or indirect benefit the quality of education in the classroom. It is the process by which, alone and with others, teachers review, renew and extend their commitment as change agents to the moral purpose of teaching (Day, 1999).

According to Button (2010) perceptions of teachers have the potential to shape the world they inhabit and are shaped tremendously by social forces. Such social changes can result in teachers having skewed or biased perceptions of some of the people they deal with on a daily basis as well as teaching. He further indicates that, rather than the CPD nothing can solve difficulty of teachers' job. Elmore (2002) further indicates that in some other occasions administrators can create professional development as training in discrete skills those teachers feelings have limited or no applicability to their real work. Teachers appear to find it difficult to articulate causal relationships between a change in practice and a change in pupils' perceptions. They also describe whether CPD encouraged pupil to change their practice, or whether it was a desire to change their practice that encouraged them to participate in CPD in the first place and it is rare to find (hard) evidence of pupil improvement resulting from CPD. Numerous problems surround this area evaluations of CPD are often more

subjective, or based on "gut feeling or perceptions, nonetheless; a greater awareness of positive impact of CPD can increase teachers' enthusiasm to become more involved in the CPD process (Edmonds and Lee, 2002).

Teachers in the present Ethiopia are expected to be reflective and change-oriented to meet the government and public demand for quality education. They are expected to consider the dynamic nature of the learners and the society. This situation signifies the importance of CPD aiming at improving the teaching learning process thereby improving quality of education. To this end before the introduction of General Education Quality Improvement Package (GEQIP), Teacher Development Program (TDP) of in-service and CPD were developed in 2005 in a modular approach and introduced on rigorous implementation in all Ethiopian primary schools (Hailu&Jabessa, 2010).

According to Ethiopian Minstry of Education (MoE) (2011), even though CPD is one of the most important programs to update teachers' professional competence, knowledge and skills to attain a desired quality of education, teachers were complaining about its complexity. Due to this professional development may be perceived differently by individual teachers, hence, teachers' experiences and, perceptions of the impact of their professional development amount to be an important part of an evaluative process of their continuing professional development.

As reported by South Nations, Nationalities and Peoples Regional State Education Bureau (SNNPREB) of Ethiopia (2012, as cited in Dimbisso, 2009), like other Ethiopian Regional areas and schools, teachers and principals in South Nations, Nationalities and Peoples Region were trying to go through their CPD activities, but it was challenging to teachers and school leaders. Moreover as Arbaminch town education department report (Astatkie, 2010) indicated, teachers have faced lack of interest and have no positive attitude to take CPD as a means for their Proffesional Development and rising students' achievement, every teacher feel it as mandatory task in their career. But the CPD framework stated that CPD is a compulsory requirement for those who teach in Ethiopian schools. It is the civic and professional duty of all teachers to engage in CPD (MoE, 2009). Thus, in spite of the above findings on the CPD, the researcher inspired to undertake a study that deals with exploring teachers' perceptions, practice and challenges of implementing school based continuous professional development in particular reference to Arbaminch town Secondary & preparatory Schools.

The general objective of this research was aiming at exploring teachers' perceptions, practices and challenges of school-based teacher professional development program. Thus, based on the general objective the following specific objectives are stated.

➢ To investigate teachers' perceptions toward the purpose and benefit of the School based continuous teacher professional development.
➢ To examine how do teachers practice CPD activities in secondary and preparatory schools.
➢ To identify major challenges hindering the effective implementation of CPD in the secondary and preparatory schools.

2. Method

Sequential explanatory mixed research design, was used i.e., Concurrent Nested Model.This model involves the collection and analysis of quantitative data first and followed by the collection and analysis of qualitative data at the second place. Both primary and secondary sources of data were used in this study. The primary data sources were teachers, school principals, school CPD coordinators, town education officers and CPD focal person. There are four Secondary and preparatory Schools in Arbaminch City administration namely: Arbaminch Secondary and preparatory School, Chamo Secondary and Preparatory School, Abaya Secondary School and ArbaminchLimat Secondary School. In these schools there are 284 teachers, 4 school principals, and 4CPDcoordinators. Of them 70% of teachers were taken using proportional random sampling, as illustrated in the below table 1 from each school, because of their homogeneity. While 100% of the school principals, and CPD coordinators both at the school and education office were selected using purposive sampling due to their small size or manageability.

The researcher used non probability sampling i.e. purposive sampling technique to select both the town and Schools this is because, the town is selected as the researcher worked in the town as teacher for the last ten years and the reasons why the researcher chose these schools are: first, the researcher gains easy access to these schools sites. Second, the researcher has built up the trusting relationship with the teachers in school as his closer work relationships with a teacher there. These were helping the researcher to easily obtain relevant information.

Table1.
Distribution of the target population, the sample and sampling techniques

No	Types of Respondent	Population			Sample Size			% of Sample Size	Sampling techniques
		Male	Female	Total	Male	Female	Total		
1	Teachers								Proportional random sampling
	A/minch (1)	91	27	118	64	19	83		
	Chamo (2)	44	36	80	31	25	76	70	
	Abaya (3)	41	19	60	29	13	52		
	Limat (4)	17	9	26	12	6	18		
	Total	193	91	284	135	63	198		
2	Principals	3	1	4	3	1	4	100	Purposive sampling
3	School CPD coordinators	4	0	4	4	0	4	100	Purposive sampling
4	Education office CPD focal person	1	0	1	0	1	1		Purposive sampling

Data collection instruments used were questionnaire, semi-structured interview, and document analyses. Thus, one of the instruments was used in this study is self developedquestionnaire. A pilot study of the Questionnaire was carried out at school before condicting the actual research. The purpose of the pilot study was to verify the reliability of the questionnaire. Cronbach's alpha was used to determine the reliability of the instrument and to determine the correlation of individual items to the survey total and tested as high, with an average of over .70. Thus, the computed reliability of the instruments were.95, .79, .96 and .94 for items prepared to describe teachers' perception, practice and challenge of school based CPD implementation. Hence, the test conducted confirmed that the instruments were reliable as statistical literature recommend a test result of .65 (65% reliability) and above as reliable (Gliem&Gliem, 2003).

Quantitative data analysis approach was used to analyze close-ended questions; whereas, qualitative data analysis approach was used to analyze the datacollected from open-ended, semi-structured interview, and document analysis. The researcher used inferential statistics such as independent samples t- test and one way ANOVA to make sure whether there was a significant statistical difference in the distribution of preferences of respondents in terms of their biographic data such as sex, years of teaching experience and qualifications of a given items.

3. Results and Discussion

Before discussing the data related to the basic questions, a summary of the characteristics of the subjects are presented. Three biographical variables were selected on the basis of their potential to influence results of this research. The biographical variables included: sex, years of teaching experience, and educational qualification.There is gender disparity among the respondents because data revealed gender imbalance among the teacher educators i.e. 67.5% and 31.5% of male and female respectively. Of the respondents, 14% of the respondents were between one to ten years of experience as teacher, about 27% of the teachers served for eleven to twenty years, and 37% served for twenty one to thirteen, while those served more than thirteen also accounts 21 %. Regarding educational qualification majority of teachers which accounts 84.5% are first degree holders which is kept as minimum requirement for first cycle secondary school (grade nine and ten).

And 14.5% of the respondents are a second degree holder which is kept as requirement for second cycle secondary school (grade eleven and twelve).

3.1. Perceptions of teachers on the school based CPD program

It is worthwhile to explore the relationship between teachers' perceptions and experiences of CPD activities in the real school context because CPD is effective only when teacher's learning occurs in an authentic way through teachers' active engagement, participation and collaboration (Landt, 2002). This implies teachers' positive perception toward CPD program, will create suitable situation for CPD activities. Data on these issues were collected by means of 11 items and the results are presented below in table 2, harmonizing with data's obtained by open-ended questioners, interview and document analysis.

Table 2.
Frequency, percentage, mean and grand mean values of perceptions of teachers toward school based CPD program (N=198)

	Items	SA		A		U		D		SD		Mean
		F	%	F	%	F	%	F	%	F	%	
1	CDP is very important in developing my learning and teaching skills	36	18.2	87	43.9	33	16.7	28	14.1	14	7.1	3.52
2	CPD activities are important for updating of previous subject matter knowledge and search for new subject knowledge	43	21.7	80	40.4	45	22.7	18	9.1	12	6.1	3.63
3	CPD plays an important role in improving my professional growth	45	22.7	82	41.4	40	20.2	15	7.6	16	8.6	3.63
4	CPD improves my teaching competence	23	11.6	94	47.5	48	24.2	27	13.6	6	3	3.51
5	CPD is used to updating and sharing of pedagogical content knowledge	37	18.7	94	47.5	38	19.2	16	8.1	13	6.6	3.64
6	CPD is used to improve my knowledge and application of teaching strategies and skills	32	16.2	89	44.9	46	23.2	16	8.1	15	7.6	3.54
7	CPD enable every teacher continues to refine their skills and knowledge	36	18.2	82	41.4	46	23.2	21	10.6	13	6.6	3.54
8	CPD provides changes in knowledge, skills, and attitudes of participants	45	22.7	76	38.4	50	25.3	15	7.6	12	6.1	3.64
9	CPD provide continuous support and follow-up activities	45	22.7	82	41.4	41	20.7	20	10.1	9	4.5	3.83
10	Teachers found to be incompetent unless should attend compulsory developmental program	35	17.7	76	38.4	54	27.3	21	10.6	12	6.1	3.51
11	The ultimate goal of CPD is to enhance learner's learning	46	23.2	75	37.9	49	24.7	17	8.6	11	5.8	3.65
	G/mean											**3.55**

Mean scores 1.00-1.80= Strongly Disagree (SD), 1.81-2.60=Disagree (D), 2.61-3.40=Undecided (U), 3.41-4.20=Agree (A) and 4.21-5.00=Strongly Agree (SA)

Regarding perception of teachers toward school based CPD, as expressed in table 2, all respondents rated all items almost similarly and the mean scores of teachers' rangi from 3.51 to 3.82 with the total mean score of 3.56. Thus both the mean and the grand mean scores of the respondents felled "agree" scales.This indicates that almost all respondents perceived school based CPD program positively as it improves their teaching and learning skill, important for updating of their previous subject matter knowledge and searching new knowledge, improve their teaching competence, updating and sharing of pedagogical content knowledge between teachers, improve their knowledge and application of teaching strategies and skills, used for continues refine of skills and knowledge, for changes in knowledge, skills, and attitudes of participants, to provide continuous support and follow-up activities, and they belief as teachers become incompetent unless should attend compulsory developmental program.

To sum up, from this data, one can judge as there is positive perceptions of teachers toward school based CPD program. Furthermore, result of calculated Independent sample t-test and summary of one way ANOVA

were employed to see if there was statistically difference among teachers on their CPD perception on the basis of their biographic difference such as sex, educational qualification and years of teaching experience.

Firstly, respondent teachers were also compared using mean scores and "t" values for mean comparisons on the basis of their gender difference, to cheek as there is significant difference among teachers in terms of their gender difference on their perception toward school based CPD program.

Table 3.
Mean differences between teachers CPD perception based on their Gender difference (N=198)

Variable	Gender	N	Mean	Std.	df	t-value	p
Teachers CPD perceptions	Male	135	3.5407	.9749	196	-.590	.55
	Female	63	3.6277	.9472			

A shown on the above table 3 the mean score for both male and female were 3.54 and 3.62 respectively, (p<.05 level (t =-.590, df =196, p=.55)) Thus, the result revealed that there is no statistically significant difference on teachers' perceptions of teachers toward school based CPD across their sex in the study area.

Table 4.
Mean differences between teachers CPD perception based on their educational qualification (N=198)

Variable	Level of Education	N	Mean	Std.	df	t-values	p
Teachers CPD perceptions	1st degree	169	3.5395	.9997	196	-1.017	.31
	2nd degree	29	3.7367	.7188			

Meanwhile, an attempt was made using mean score and independent sample t-test to know as there is difference among teachers in terms of their educational qualification on perception toward school based CPD program. As indicated in the above table 4 independent sample t-test results (p<.05 level (t = -1.017,df =196, p=.31)) there was no statistically significant difference in the perceptions of teachers on the basis of their educational qualification towards School based CPD program.

Table 5.
Summary of one way ANOVA among respondents CPD perception on the basis of their years of teaching experience

		Sum of Squares	df	Mean Square	F	Sig.
Service year	Between Groups	47.899	40	1.197	1.375	.08
	Within Groups	136.748	157	.871		
	Total	184.646	197			

Further analyses were made using summary of one way ways ANOVA to find out if there were significant differences on the perception of teachers toward CPD program with regard to their work experience as measured by number of years they stayed in the profession. The results in the table 5 revealed there is no a statistically significant difference, but it shows as to some extent differences, on teachers' perceptions toward school based CPD program across the service year. (p<.05 level (F (40,157) =1.375, p=.08)). Therefore, to specifically identify the group that has a relatively better strong positive perception, a post hoc comparison was conducted. The results are presented in the table 6.

As the post hoc comparisons using Tukey HSD test indicated the mean scores of teachers with service year between (1-10 years) for the items regarding to teachers perception toward school based CPD program (m=3.35, p=.35) felled "undecided" scales is to some extent smaller than the mean scores of the others three groups felled "agree" scales for the items regarding to teachers perception toward school based CPD program (m=3.47, p=3.47), (m=3.75, p =3.48) and m=3.88, P =3.75) respectively. Thus from this possible to be concluded that teachers with more teaching experience are relatively positive perception towards school based CPD program than from those teachers having fewer teaching experiences.

Table 6.

The post hoc comparison of teachers' perception toward school based CPD program across their service year

Years of teaching experience	N	Mean	Std. Deviation	Std. Error	Sig.	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
1 to 10 years	28	3.3571	.89720	.16956	3.35	3.0092	3.7050
11 to 20 years	54	3.4781	.99401	.13527	3.47	3.2068	3.7494
21 to 30 years	74	3.7592	.83989	.09763	3.48	3.5646	3.9538
31and above	42	3.8892	1.13793	.17559	3.75	3.6346	3.9638

*The mean difference is significant at the 0.05 level

3.2 Perceptions of Teachers on the Benefit of School Based CPD Program

Data on this issue were collected by means of the following 13 items and the results are presented below in table 7.

Table 7.

Frequency, percentage, mean and grand mean values of teachers' perceptions on the benefits of school based CPD Program in the teaching and learning process (N=198)

	Items	SA		A		U		D		SD		Mean
		F	%	F	%	F	%	F	%	F	%	
1	CPD encouraged me to implement active learning methods in the class room	4	2	42	21.2	80	40.4	58	29.3	18	9.1	2.81
2	CPD help me to understanding students' diverse needs	36	18.2	73	36.9	58	29.3	19	9.6	12	6.1	3.61
3	CPD enabled me to manage my classroom effectively	36	18.2	72	36.4	55	27.8	22	11.1	12	6.1	3.51
4	CPD gave me direction how to implement continuous assessment	12	6.1	10	5.1	48	24.2	62	31.3	66	33.3	2.49
5	CPD enhanced my commitment to teaching.	37	18.7	69	34.8	52	26.3	23	11.6	15	7.6	3.81
6	CPD enhanced opportunities for interaction with program participants and other professionals	36	18.2	70	35.4	58	29.3	19	9.6	14	7.1	3.78
7	Peer appraisal of teachers contributes to team building in schools	9	4.5	46	23.2	61	30.5	71	35.5	11	56	2.85
8	CPD Changed the way I think about teaching and learning	32	16.2	73	36.9	51	25.8	30	15.2	10	5.1	3.63
9	CPD improved professional ethics of teachers	37	18.7	69	35.4	55	27.8	25	12.6	11	5.6	3.97
10	Fosters collaboration and has motivating features to teachers to fulfill standards	35	17.7	73	36.5	55	27.8	22	11.1	13	6.6	3.67
11	Increases teachers' social status and enhances human relations	2	1	32	16.2	48	24.2	102	51.5	14	7.1	2.52
12	CPD enable me to increases levels of students achievement	30	15.2	66	33.3	64	32.3	27	13.6	10	5.1	3.73
13	CPD Enhances knowledge and skills in teaching and knowledge in subject areas, reinforcing previous trainings	32	16.2	66	33.5	60	30.5	28	14.2	10	5.1	3.97
	G/mean					3.41						

Mean scores 1.00-1.80= Strongly Disagree (SD), 1.81-2.60=Disagree (D), 2.61-3.40=Undecided (U), 3.41-4.20=Agree (A) and 4.21-5.00=Strongly Agree (SA)

As indicated above, table 7, deals with the perceptions of teachers on the benefits of school based CPD Program in the teaching and learning process. Regarding item 1 teacher respondents were asked to give their opinion on the extent to which CPD trainings encouraged teachers to implement active learning methods in the class room. Accordingly only very small number 4(2%), respond strongly agree, 42(21.2%) of respondents respond agree and majority 80(40.4%) of teachers reacted undecided. On the other hand, 58 (29.3.5%), and 18(9.4%) replied disagree and strongly disagree respectively.

The mean scores of the item were 2.81 felts "undecided" level. From the data results, possible to be concluded that teachers' have uncertainties on the benefit of school based CPD program for implement active learning methods in the class. This is in contrast with 2009 (MoE) CPD guide line stating CPD made them supervise active learning methods effectively and created cooperation between students.

In item 2 of table 7, the respondents were asked to rate the extent to which CPD helps them to understanding students' diverse needs. Accordingly, 36(18.2%), and 73(36.9%) of teachers rated strongly agree, and agree respectively. On the other hand, of teachers 58(29.3%), 19(6.9%), and 12 (6.1%) replied undecided, disagree and strongly disagree respectively. The mean of the item is 3.61 which are in the range of "agree". From the data it can be said that there is appositive perception of teachers as CPD program activities are helping for understanding students' diverse needs

In item 3 of the same table, various responses were given regarding the extent to which the CPD activities enabled teachers to manage classroom effectively. According to MoE (2009), guide line one of the major responsibility of school based CPD training program is to improve teachers class room management skill. Therefore, 36(18.2%) and 72(36.4%), of respondents responded strongly agree and agree respectively, while 55(27.8) respond undecided. Only the small number which accounts 22(11.1%), 12(6.1%) of teachers replied disagree and strongly disagree respectively. The mean score of this item response is 3.51 which are in the scope of "agree". From thisresult, possible to be concluded that in the study area there is positive perception of teachers as skill they have from CPD enabled them for effective class room management.

In table 7, item 4 states "CPD gave me direction how to implement continuous assessment". In responding to this item only the small number of respondents 12 (6.1%0 and10 (5.1) of the students showed their agreement responding strongly agree and agree respectively whereas the majority 48 (24.2%), 62(31.3) and 66 (33.3) of them expressed their undecided, disagree and strongly disagree respectively. The mean score of the item is 2.49 which are in the scope of low level that is "disagree". Generally, it is below the average mean of the above table. This implies that the implementation of continuous assessment is unsatisfactory in the schools under study.

Nevertheless, teachers mean scores of items 5 to 6 stating "CPD enhanced my commitment to teaching and opportunities for interaction with program participants and other professionals"   become 3.81 and 3.78 respectively and these mean scores set in "agree" scale. This details that, teachers have positive perception as knowledge and skill they have from CPD addressed commitment to teaching and opportunities for interaction with program participants and other professionals.

Item 7 which says: "Peer appraisal of teachers contributes to team building in schools." Only the small number of respondents 9 (4.5%) respond agree, even 46(23.3) say agree while 61(30.5) respond undecided. And of the respondents 71(35.5) and 11 (5.5) replied disagree and strongly disagree. The mean value of the responses is between "disagree" and "Agree". That is "undecided" (2.85) which is below the grand mean (3.41).

Therefore the result of item 7 analyses implies that considerable numbers of teachers have no positive attitudes as peer appraisal contributed to team building in the school. In line with this idea, Dary and Terry (1993) have noticed that, if the teachers had no appropriate perception on the Peer appraisal of teachers' contribution to team building in schools they develops negative attitudes for various reasons. For instance, a teacher who preferred to use traditional or passive instructional method of teaching may look shy and uncooperative for peer coaching and peer appraisal.

Items 8, 9 and 10 of table 7, states, CPD Changed the way I think about teaching and learning, CPD improved professional ethics of teachers and fosters collaboration and has motivating features to teachers to fulfill standards. The mean scores of items become 3.63, 3.97 and 3.67 respectively which fell in "agree" scale. This implies that, teachers positively conceive that CPD addressed immediate school and classroom needs and changed the way they think about teaching and learning and cooperation between them.

With item 11 of table 7, states "CPD increases teachers' social status and enhance human relations" the respondents were asked to give their perception to implement CPD actions. Accordingly, insignificant number 2 (1%), 11(13.75%), and 32(16.2%) of respondents replied strongly agree and agree respectively while 48 (24.2) respond undecided. On the other hand, the majority 102 (51.5%), 14 (7.1%) of respondents replied disagree and strongly disagree respectively. The mean value of the item is 2.52 ranging "disagree".

Thus, it can be said that there is negative perceptions of teachers on the concepts CPD increases teacher's social status and enhance human relations. In contrast with this, Bolam,(1993) and Day, (1999) states: understanding of the benefit of CPD may be helpful to facilitate and improve CPD processes and it is also important to teachers' personal lives and career development.

As describe in table 7, items 12 and 13 respondents rated almost similarly with the mean scores of 3.73 and 3.97 lay "agree" scales. This indicates that respondents agreed that CPD enable them to increases levels of students achievement and enhances knowledge and skills in teaching and knowledge in subject areas, reinforcing previous trainings, which is alike with 2009 (MoE) CPD glide line stating CPD enable teachers to improved subject matter, leadership or management knowledge and skills and encouraged them to solve students'/teachers' problems.

Finally, to check if there was difference between respondents on their perception toward the benefits of school based CPD program based on their biographic difference such as sex, educational qualification and service year mean score, calculated independent sample t-test mean comparison and summary of one way ANOVA analysis was conducted and the results was presented in the below tables.

Table 8.
Mean differences between teachers on their perception toward the benefit of CPD based on their Gender difference (N=198)

Variable	Gender	N	Mean	Std.	df	t-values	p
Teachers perceptions toward the benefit of school based CPD	Male	134	3.5436	1.17208	194	-.026	.35
	Female	62	3.7084	1.13012			

As the above table 8, illustrated both the mean scores and "t" values for mean comparisons of responses of the groups on the basis of their gender difference expose, mean score for both male and female ranked "agree" and the t-value revealed as there is no statistically significant difference on the perceptions of teachers toward the benefit of school based CPD program in terms of their gender difference in the sample schools (p< .05 level. (t = -.026, df =194, p=0.35))

On the other hand, an effort was made on the table 9 above, using mean score and independent sample t-test to know as there is difference among teachers in terms of their educational qualification on their perception toward the benefit of school based CPD program. But as indicated in the above table, the mean score for both qualification lay "agree" and the t-value indicates as there is no statistically significant difference (p< .5 level. (t = -.475, df =194, p=.63)). Thus from the above analysis possible to conclud that there is no difference in the perception of teachers toward the benefit of school based CPD in the study area

Table 9.
Mean differences between teachers on their perception toward the benefit CPD based on their educational qualification difference (N=198)

Variable	Educational Qualification	N	Mean	Std.	df	t-values	p
Teachers perceptions toward the benefit of school based CPD	1st degree	168	3.5797	1.17940	194	-.475	.63
	2nd degree	28	3.6923	1.03944			

As table 10 shows,summary of one way ANOVA revealed as there no a statistically significant difference among teachers in terms of their service year on their perception toward the benefit of school based CPD program (p<.05 level across service year. F (49,146)) =1.278 p=.10)).

To sum up, the above data analysis, concerning perception of teachers toward the benefit of CPD program indicated that teachers have positive perception on the benefits of school based CPD program for teaching and learning process in the study area. But also the analysis implies as considerable number of teaches did not agree on the some benefits of CPD programs such as for implementation of active learning, and continuous assessment, CPD rolls of team appraisal, and as CPD enhance social status and human relations. The study also

indicated as there is no difference among respondents on the basis of their demographic differences such as sex, educational qualification and service year on their perception toward the benefit of CPD program in the sample schools.

Table 10.

Summary of one way ANOVA among respondents on their perception toward the benefit of CPD program based on years of teaching experience

		Sum of Squares	df	Mean Square	F	Sig.
Service year	Between Groups	54.739	49	1.117	1.278	.10
	Within Groups	127.670	146	.874		
	Total	182.408	195			

3.3 The practice of implementation of CPD program in the School

Practice is the vital phase in any type of CPD activity. Fullan (1995) indicated that, careful planning, open communication, cooperation among implementers and support obtained from different directions are important factors that need to be considered in implementing CPD program. According to him, what attracts teachers to PD is their belief that it will expand their knowledge and skills, contribute to their growth, and enhance their effectiveness with students. He further urges CPD program implementers, apart from looking into the motivational factors, to also consider the process of change for teachers. Data on this issue were collected by means of the following 12 items and the results are presented below in table 11 harmonizing with data's obtained by open-ended questioners, interview and document analysis.

Table11.

Frequency, percentage, mean and grand mean values of practices observed on the school-based CPD program (N=198)

		SA		A		U		D		SD		Mean
	Items	F	%	F	%	F	%	F	%	F	%	
1	I am involved in action research	40	20.2	72	36.4	44	22.2	39	19.5	3	1.5	3.54
2	I am properly organizing my portfolio by recording all CPD documents.	52	26.3	61	30.8	44	22.2	39	19.5	2	1.0	3.61
3	I am participate on peer coaching on CPD actions	19	9.6	46	23.2	72	36.4	53	26.8	8	4	3.07
4	I am practicing on mentoring other teachers on CPD actions	16	8.1	36	18.2	70	35.4	70	35.4	6	3	2.92
5	I am involving in the selection of the school CPD priorities	21	10.6	107	54	32	16.2	34	17.2	4	2	3.54
6	I have my own CPD plan	12	6.1	55	27.8	56	28.3	63	31.8	12	6.1	2.96
7	All teachers prepared their CPD modules and portfolio in the school	35	17.7	72	36.4	42	21.2	40	20.2	9	4.5	3.42
8	A certificate is prepared for me after completion of the trainings	53	26.8	71	35.9	37	18.7	31	15.7	6	3	3.68
9	My instructional knowledge and skills improved after CPD training	49	24.7	56	28.3	41	20.7	39	19.7	11	5.6	3.71
10	Continuous assessment is applied after CPD training	14	7.1	42	21.2	65	32.8	54	27.3	21	10.6	3.24
11	Active learning methods are implemented after CPD training	18	9.1	40	20.2	66	33.3	54	27.3	19	9.6	2.96
12	The discussion is made after the identification of CPD priorities	18	9.1	39	19.7	65	32.8	54	27.3	20	10.1	3.23
	G/mean											**3.32**

Mean scores 1.00-1.80= Strongly Disagree (SD), 1.81-2.60=Disagree (D), 2.61-3.40=Undecided (U), 3.41-4.20=Agree (A) and 4.21-5.00=Strongly Agree (SA)

As expressed in table 11, all respondents rated all items in the mean scores ranging from 2.61 to 3.4 and 3.41 to 4.20 which is "undecided" and "agree" respectively with the total mean score of 3.32 that confirms the implementation of CPD program was low in the sample schools. The results are discussed as follows:

Regarding item 1, 2, 5,7,8 and 9 stating "I involve in action research, I am properly organized my portfolio by recording all CPD documents, I am participate in school CPD priority, prepared CPD portfolio, CPD trainings

improve instructional knowledge and skill" teachers mean scores set in "agree" scale. This confirmed that majorities of teachers are involving in the implementation of the above mentioned CPD activities in the study area. Whereas, the grand mean scores fell "undecided" scale. This expresses that still significant number of teachers are faced difficulty to decide whether or not these items were implemented effectively in the sampled schools or implies that the activities were to some extent not accomplished.

On the other hand as can be seen from the table, the mean scores for items 3, 4, 6, 10, 11, and 12 fell "undecided" a scale which indicates that the teachers are not confidential on the issues or in the implementation of listed CPD activities. For the items, I am participate on peer coaching on CPD actions (mean 3.07), I am practicing on mentoring other teachers on CPD actions (mean 2.92), I have my own CPD plan (mean 2.95), Continuous assessment is applied after CPD training (mean 3.23), Active learning methods are implemented after CPD training (mean 2.96), and for the item the discussion is made after the identification of CPD priorities (mean 3.20)

This proves that the teachers are not fully participated on peer coaching and mentoring and significant number of teachers has no annual and individual CPD plan. It also told as the large number of teachers did not prepare their CPD modules, there is less effort to apply both continuous assessment and active learning approach in the study area and no culture of discussion among teachers after the identification of CPD priorities. In general from the above data analysis possible to be said that CPD program was not fully implemented in these schools.

Furthermore, in order to be check if there was difference in the practices/implementation of CPD among respondents on the basis of their biographic difference such as sex, educational qualification and years of teaching experienceindependent t-test and one way ANOVA analysis was conducted. As illustrated in the tables 12 below.

Table 12.
Mean differences between teachers CPD practice based on their gender difference (N=198)

Variable	Gender	N	Mean	Std.	df	t-values	p
Practice observed in the CPD implementation	Male	135	3.0691	1.07698	196	-.048	.71
	Female	63	3.0767	.93437			

As illustrated in the above table 12 both the descriptive statistics and "t" values for mean comparisons of responses of the groups on the basis of their gender difference expose, mean score for both male and female ranked "undecided" and the t-value revealed as there is no statistically significant difference in the practices/implementation of CPD program among respondents in terms of their gender difference in the sample schools (p< 0.05 level. (t = -.048, df =196, p=.71).

Table 13.
Mean differences between teachers CPD practice based on their Educational qualification (N=198)

Variable	Educational qualification	N	Mean	Std.	df	t-values	p
Practice observed in the CPD implementation	1st degree	169	3.0005	.96822	196	-2.367	.02
	2nd degree	29	3.4856	1.28504			

The above table 13, shows mean score and calculated t-value for teachers CPD practices, as difference is shown on the basis of their educational qualification. Both the descriptive statistics and calculated "t" values for mean comparisons of respondents in the table revealed that there is statistically significant difference among teachers' in the implementation of CPD program in terms of their educational qualification i.e. the mean score of 1st degree holders felt "undecided" while the mean score of 2nd degree holders ranked "agree".And calculated t-value (p< .05 level. (t = -2.367, df =196, p=.02)). Thus, to specifically identify the group that has relatively better implement the mean comparison was conducted.

The mean comparisons using descriptive statistics indicated that the average mean scores of 1st degree holders for the items regarding to CPD implementation of teachers (m=3.00, SD=0.968) was lay at "undecided" scale and the average mean scores of 2nd degree holders for the items regarding to CPD

implementation of teachers (m=3.486, SD=1.285) lay at "agree" scale. This confirmed as 2nd degree holders better practicing CPD program than 1st degree holders in the study area.

Table 14.
CPD practice summary of one way ANOVA among respondents on the basis of their teaching experience

		Sum of Squares	df	Mean Square	F	p
Service year	Between Groups	0.868	43	1.112	0.269	.85
	Within Groups	208.68	154	.888		
	Total	209.55	197			

As illustrated in the above table 14, summary of one way ANOVA, the result revealed that there is no statistically significant difference in the practices/implementation of CPD program among respondents on the basis of their years of teaching experience that is (p< 0.05 level. (F (43, 154) =0.269 p=.85)).

3.4. Major challenges observed in the implementation of school-based CPD Program

Implementation is the vital phase in any type of CPD activity. Fullan (1995) indicated that, careful planning, necessarily materials, cooperation among implementers and support obtained from different directions are important factors that need to be considered in implementing CPD program. According to him, what attracts teachers to PD is their belief that it will expand their knowledge and skills, contribute to their growth, and enhance their effectiveness with students. He further urges CPD program implementers, apart from looking into the motivational factors, to also consider the process of change for teachers.

Regarding factors that affects the effective implementation of CPD program in secondary and preparatory schools, teachers were asked to rate the extent of influence by using five point scales as 'strongly disagree', 'disagree', 'undecided', 'agree' and 'strongly agree'. Then the calculated average mean for every 15 items were interpreted by using the level of agreement as 1.00-1.80=Strongly Disagree, 1.81-2.60=Disagree, 2.61-3.40=Undecided, 3.41-4.20=Agree and 4.21-5.00=Strongly Agree and the results are presented below in table 18, harmonizing with data's obtained by open-ended questioners, interview and document analysis.

As indicated in table 15, all respondents' teachers set almost at similarly rank i.e. agrees, apart from item 13 which is "disagree". As can be seen from the table, the mean scores for items fell "agree" a scale which indicates as respondents agreed on the idea that all of the variables mentioned in the items had higher and higher influences on practices of CPD program in sampled secondary and preparatory schools.

Challenges indicated: lack of appropriate tanning from school CPD coordinator (mean 4.30), absence of motivation (4.04), lack of organized training (4.26), lack of support and follow up (mean 4.15) , Adequate budget was not allocate (4.13), absence of skilled experienced supervisor (mean 4.08), absence of coordination b/n teachers and principals (3.99), Shortage of appropriate training time (mean 3.93), unwillingness of teachers (mean 3.91), absence of coordination b/n teachers and principals (3.99), shortage of time for practice (mean 3.86), not mach with real demand of teachers (mean 3.83), absence of carrier structure matched with CPD (3.81), poor management of CPD tanning (mean 3.77), less commitment of leaders (3.75) and, lack of awareness of teachers (2.2).

Thus, as indicated in the findings of the study, there were different hindering factors of CPD program in the study area. From this it is possible to conclude that the hindering factors made difficulty to implement the CPD program successfully. In general, from the data possible to conclude that the CPD program was not successfully implemented in the sampled schools but Lack of awareness of teachers is not among factors affecting the effectiveness of the CPD program in the study area.

Table 15.

Frequency, percentage, mean and grand mean values of major challenges observed in the implementation of school-based teacher professional development program. (N=198)

	Items	SA		A		U		D		SD		Mean
		F	%	F	%	F	%	F	%	F	%	
1	Shortage of appropriate training resources	55	27.8	85	42.9	25	12.6	26	13.1	6	3	3.93
2	Poor management of CPD training time	58	29.3	82	41.4	25	12.6	22	11.1	11	5.6	3.78
3	Lack of appropriate support from school CPD coordinators	46	23.3	98	49.5	16	8.1	25	12.6	10	5.1	4.30
4	Topics do not correspond with real demands of teachers	48	24.2	87	43.9	22	11.1	30	15.2	10	5.1	3.83
5	Unwillingness of teachers' to implement the CPD program	47	23.7	90	45.5	25	12.6	27	13.6	8	4	3.92
6	Lack of support and follow up from school management	48	24.2	95	48	17	8.6	27	13.6	9	4.5	4.16
7	Absence of skilled and experienced supportive supervisory personnel.	47	23.7	92	46.5	24	12.1	21	10.6	12	6.1	4.08
8	Less committeemen of Leaders	48	24.2	95	48	22	11.1	24	12.1	9	4.5	3.75
9	Shortage of time for teachers to implement the CPD actions	62	31.3	88	44.4	16	8.1	24	12.1	8	4	3.87
10	Lack of organized training on CPD programs	63	31.8	80	40.8	22	11.1	24	12.1	2	3.5	4.27
11	Absence of motivation for teachers by the concerned bodies on the actions of CPD	60	30.3	89	44.9	21	10.6	20	10.1	7	3.5	4.04
12	The absence of career structure with the actions of CPD	44	22.2	89	44.9	25	12.6	31	15.7	8	4	3.81
13	Lack of awareness of teachers on CPD activities	12	6.1	11	5.6	44	22.2	75	37.9	56	28.3	2.23
14	Adequate budget was not allocated to support CPD activities	61	30.8	93	47	15	7.6	23	11.5	5	2.5	4.13
15	Absence of coordination between teachers and school principals	54	27.3	88	44.4	23	11.6	23	11.6	9	4.5	3.99
	G/mean											**3.98**

Mean scores 1.00-1.80= Strongly Disagree (SD), 1.81-2.60=Disagree (D), 2.61-3.40=Undecided (U), 3.41-4.20=Agree (A) and 4.21-5.00=Strongly Agree (SA)

4. Conclusions and Educational Implications

Many educators describe the constructivist approach to learning as a process whereby students work individually to explore, investigate and solve authentic problems and become actively engaged in seeking knowledge and information. This is in contrast to being passive recipients as in the traditional lecturer-centric learning which has its foundation embedded in the behavioral learning theory.

Effective implementation of CPD program needs positive perceptions of stakeholders particularly of teachers, because teachers are the key doers to accomplish the intended quality of education through CPD. This clearly requires positive attitude of teachers towards the practice of CPD program. The findings of this research proved as there is good condition in this regard in the study area. There are many different benefits of CPD program listed in the MoE CPD document in teaching and learning process. As shown in the finding, it is possible to conclude that the contribution of school based CPD for the improvement of classroom activities as well as the students' academic achievement was inadequate in the study area.

With regard to the perception of teachers towards CPD program, the findings of the study revealed that though they did not practice in the actual classrooms, their attitude seem to be positive. Therefore, it can be concluded that, though teachers did not implement CPD programs, their attitude towards CPD seem to be positive. Thus, from this, one can conclude that the CPD program was not implemented successfully in the sampled schools.

There was large number of problems and challenges that affected the normal functioning of CPD program in the sampled schools. Some of these problems are personal, while the others are internal and external to school compounds. Thus from this study, it is possible to conclude that the hindering factors plays their own big roll for unsuccessfully implementation of CPD program in the study area. Lastly, based on the overall results of this research results important to be concluded that even though there was fertile ground (positive perceptions) of teachers towards CPD program in the study area, the result shows that the status of practice/implementation of continuous professional development was not effective as it is intended.

On the basis of the findings and conclusion drawn with respect to teachers' perception, practices and challenges of school based continuous professional development program, the following recommendations are identified.

> To improving the current situation, ministry of Education and policy makers should assess the policy governing teachers' CPD. Its role should switch from bureaucrats who aim at achieving organizational goals, to facilitators who genuinely should show its commitment on the CPD of teachers, in a way to create the space needed by them.
> Ministry of education should establish a culture of sharing and learning among teachers and schools, which is conducive to their active participation.
> The Reginal Education Bureau should prepare seminars, workshops, and experience sharing programs among schools in order to let teachers have more opportunities, and experience sharing regarding implementation of CPD
> There is also a need to educate school principals, school CPD coordinator and CPD focal persons how to support and follow up teachers CPD programs in the school
> School leaders must create a climate that promotes the continuous professional learning forming collegiality among teachers so as to facilitate cross-fertilization of ideas and experience
> The school should assign coordinator with better CPD experience, and recognize the efforts and achievements of the teachers in CPD implementation and praise them either in material or moral frequently for appropriate performance.
> CPD coordinators should give immediate and sensitive responses and promote collaboration opportunities to colleagues in order to build up a sharing and learning cultures.

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