The Impacts of School's Matrix and Teachers' Accountability and Responsibility Professional Development Practices in Oromia Regional State, Ethiopia

Girma Moti Geletu*   , Dawit Mekonnen Mihirete

Department of Curriculum Studies, Addis Ababa University, Addis Ababa, Ethiopia

Research Article

ABSTRACT

The study examined the impacts of school's matrix and teachers' accountability and responsibility on their professional development practices in Oromia Regional State through identifying the success and challenges. Mixed method with concurrent triangulation design was employed on the basis of pragmatism as philosophical foundation. A total of 618 respondents were selected by using stratified sampling, simple random sampling, availability sampling and purposive sampling techniques. The data were collected from both primary and secondary sources of data by using different data collection tools like questionnaires, interview, focus group discussion and document examination. The findings showed that teachers' continuous professional development is influenced by the lack of professional attraction like lack of school's work culture, needs, prestige and values, motivation, reimbursements and provision of appropriate career growths. The provisions of professional, technical and material supports for teachers' continuous professional development practices were limited to ensure effectiveness of the program. Pertaining to this, there was no statistically significant difference at $p>0.05$ level in mean scores for the three groups of respondents $(F(2,539)=1.929, p=0.166)$. Therefore, the school's matrix should be managed, and professional accountability should be taken and responsibilities should be shared by leaning communities of practices in primary schools.

INTRODUCTION

School's matrix or contextual dynamics such as political, economic and social environment inclined to affect teachers' motivation to aspire for teaching profession in general and Continuous Professional Development CPD activities in particular [1]. Teachers' CPD has been intensified worldwide recognizing that teachers are the most significant agents in the implementation of educational reforms [2]. Teachers' CPD becomes an important component of teacher's policy reforms and practices throughout much of the world [3-5]. Teachers CPD practice is required as long as teachers remain in professional careers to attain the 21st century competencies and skills [6], The other dynamics related to school policy settings like school work culture, curriculum practices, leaderships and local contexts of schools where teachers' CPD enacted affect executions of its activities [7,8]. This further influences the quality of teachers' professional competencies and students' learning outcomes.

It is worth mentioning despite its length that the ideas of practice and professional development in mind we need to encourage further study of participants, contexts, professional development. How many authentic contexts are there and are categorized, if at all? What are the practices of administrators, teachers, students, parents, and other community members in one context? How do such practices interact, evolve, devolve, or remain constant? These issues require our attention at the dawn of the 21st century. We have only started scratching the surface. Likewise, poor attraction of teaching as career [9], teachers' poor motivation [10], and job dissatisfaction affected the executions of CPD activities in schools. Teachers' job satisfaction results from unique combinations of factors from different levels that affect their professional learning. Likewise, Osman and Warner [11] indicated that teacher's motivation is crucial to successful executions of CPD activities. The lack of motivation, awards and reimbursement forces teachers to resist participating in CPD activities. Since people rely on the economic return of education [12]. Thus, teachers work with poor motivation doesn't want remain as teachers with one day if they get the chance to leave the profession[10]. Teachers' CPD practices occurring hard contexts to attract teachers into teaching profession and where teacher attrition is high [13], specifically, teacher's motivation is an energetic factor that determines executions of CPD activities to maintain lifelong learning.

The CPD program will have greater success when it employs expert supports, connection with career growths, coaching, collegiality learning and mentoring relationships between novice and experienced teachers [14,15]. The CPD practices of teachers cannot be effective without the supports of school leaders regarding creating conducive learning environment [16].Situating schools as sites of professional learning [17] encourages the success of CPD practices of teachers. School principals engage in CPD practices to enhance critical skills necessary to orchestrate effective change [18]. Teachers' driven professional learning will be a win-win when educational leaders respect and assist them to their best. Educational leadership of the 21st century is not a requirement but a necessity to ensure 21st century instruction [19]. Educational leaders' optimistic orientation, intellectual openness and curiosity facilitate decision-making in CPD practices [20]. Educational leaders' motivation and committeemen create friendly learning environments that support collaborative teachers' learning from CPD practices in primary schools [21]. Therefore, leaders' hopeful vision, mission and destination encourage provisions of professional and technical supports to teachers' CPD practices.

Teachers' effective CPD practices are intimately related to their professional identity descriptions such as metaphors and dilemmas [22]. Teachers' effective professional learning takes place in a context that supports

positive images of themselves and their profession. Teachers possess perceptions of professional identity in terms of distinct aspects of their expertise as subject matter, pedagogical and didactic experts [23]. This professional metaphor motivates teachers to learn to change their professional practices [5,24].TPI metaphors have the potential to either encourage or discourage their participation in professional learning activities. Thus, teachers develop professional identity metaphors through authentic inquiry, relationships and dialogues to make their voice recognized and respected right through their careers [25]. Good teaching comes from professional identity and integrity of teachers [26]. Teachers' self- understanding as professionals assists them to ensure the effectiveness of CPD practices. The tensions and alignments of CPD need priorities among the government, school and personal teacher [27] are dynamics that affect CPD practices. Such tripartite tensions of CPD needs priorities among developmental areas challenge the attainments of intended objectives. When the discrepancy between teachers' CPD rhetoric at national level exists and its actual practices at school level [28], quality of instruction deteriorates at classroom level. Teachers' lack of affective dispositions unlike to professional competencies such as knowledge and skills affect teachers' CPD practices. School principals need to possess proper perceptions about the importance of teaching dispositions to create effective teachers [29]. Yet, some educational leaders suppose as if teachers' dispositions are less important than knowledge and skills [30]. Regarding this, Melese, Alemayehu and Meskerem [31] discussed that leaders take the largest parts in valuing desirable affective dispositions of teachers in their professional life. Thus, attaining quality education becomes possible if and only if there are professionally competent teachers.

Moreover, the information and communication technology facilities at the school level, is an engine for success when focused on resources and skills directly relevant and authentic to teacher's everyday needs and practices [32]. Eristi, Kurt and Dindar [33] further discussed that if teachers are supported with consistent PD practices; technology integration in activities balances instructional provision and leads to create meaningful learning process. Likely, Hafsah [34] stated that teacher PD programs are much important when the 21st century teachers' skills integrating teaching with technology. Likewise, Desimone and Garet [14] stated that the online learning environments supported by ICT provide access to teachers' participation in professional development practices as they move between schools. Therefore, teachers' professional development practice passes through two ubiquitous and important teachers' cultures. These are balkanization and individualism. These collaborative and individual work cultures in schools affect the implementation of teachers' professional development practices.

As we are in the third world we don't have alternative choices to improve quality of education other than improving professional competencies of teachers. Thus, as teacher educators and teachers, the researchers asked themselves four aligned brainstorming questions to be solved at the right time pertaining to the qualities of teachers' professional development practices in Ethiopian primary schools. This includes (1).What affects teachers CPD practices at school level? (2) Why teachers couldn't be effective in classrooms and how can we improve teachers' professional practices in classrooms? (3).Why students couldn't achieve minimum learning competencies and how can we improve students' learning outcomes? (4).What measures were taken to improve teachers' classroom practices? Having had such foods for thought, it becomes very important to examine the impacts of contextual matrix on teachers' professional development practices in primary schools found in Oromia Regional State, Ethiopia.

Objectives of the study

The main objective of the study was to examine the impacts of schools' matrix and teachers' accountability and responsibilities scheme pertaining to professional development practices in Oromia Regional state through identifying success and challenges. More specifically, the study has the following objectives. These are:

1. Recognize the impacts of work cultures of schools or policy environment on teachers' CPD practices in schools.

2. Examine the professional accountability sharing system of teachers concerning their CPD practices in schools.

3. Examine the influences of lack of alignments of needs of among three developmental areas (MoE, school and personal teacher) on CPD practices.

4. Evaluate the impacts of professional, technical and material supports on teachers' CPD practices.

5. Examine the influences of teachers' dispositions, professional identity, salary satisfaction and motivation on CPD engagements.

6. Identify the success and challenges of teachers' professional development practices in schools.

7. Explore the measures taken to improve teachers' CPD practices in schools.

Research questions

1. To what extents do work cultures of the schools or policy environment challenge teachers' CPD practices in schools?

2. How well are teachers professionally accountable to implement professional development program in schools?

3. How effectively are the needs of MoE, school and personal teacher aligned to impact CPD practices in schools?

4. To what extents are professional, technical and material supports provided to teachers' CPD practices?

5. To what extent do teachers' professional dispositions, identity, salary satisfaction and motivation affect their engagements in CPD practices?

6. What are the success and challenges of teachers' professional development practices in primary schools?

7. What measures were taken to alleviate the problems associated with teachers' CPD practices?

Significance of the study

Be acquainted with the matrix of professionalism and professional development practices contribute to the effectiveness of professional practices in the classroom and improvements of students' learning outcomes on top of achieving professional standards related to knowledge, practices and engagements. Furthermore, the findings, reflections and implications of the study will show directions on how to appraise teachers' professionalism through active engagements of learning groups of practices. Finally, it can be a source of evidence for future researches to be conducted on problems related to CPD practices.

MATERIALS AND METHODS

Based on practicalities of the purpose of the study and the interest of the researcher, a mixed method with concurrent triangulation design was selected and used. The selection was based on four important criteria that influence the design of mixed methods. This includes timing, weighting, mixing and theorizing procedures [35]. Therefore, the researcher employed four procedures such as design of objectives, basic research questions, data collection instruments, data collection and data analyses processes.

Sources of data

The data were collected from both primary and secondary sources of data to get adequate evidences with respect to the study. The researcher identified four categories of primary sources of data to examine factors affecting the effectiveness of teachers' CPD practices in primary schools. These are teachers, coaches and mentors, principals, cluster supervisors, CPD committees, schools' CPD coordinators and experts of schools at woredas (districts), zones, region and MoE levels, and parents selected from Parent-Teacher-Association (PTA) members. Besides, the secondary sources of data were CPD annual and action plans, portfolios and action research documents.

Sample sizes and sampling techniques

The sample size of each target population was determined believing that the ideal sample size is large enough to be selected economically in terms of both time and complexity, and small enough to be manageable and specific for analysis [35]. The sample size for probability sampling depends on population size but also the confidence level and confidence interval. Four key factors in sampling process have been judged. These are sample size, its representatives and parameters of samples, access to get the samples and sampling strategy to be used [36]. In non-probability sampling, the central purpose of the study governs the selection of participants in that each type of sample seeks to represent itself.

The researcher selected Oromia regional state by using convenience sampling technique on the bases of its appropriateness for the researcher and possibility in terms of access to reasonable data collection activities ahead of the seriousness of teachers' CPD practice problems. These are ease of communication and understanding in mother tongue language with primary schools' teachers, mentors, CPD coordinators and committees, principals, cluster resource center supervisors and experts at different hierarchies during data collection. Accordingly, two zones such as North Shewa and West Arsi zones were by using purposive sampling technique.

Table 1 showed that a total of 618 respondents were selected from 6680 sample frame units by using different non-probability and probability sampling techniques. Hence, 550 participants (84 principals, 96 mentors and 370 teachers) were responded to questionnaires. 30 participants (7 schools' CPD coordinators, 7 cluster supervisors, 3PTA members, 13 TDP experts were interviewed, and 7 CPD committees (38 members) were engaged in focus group discussion.

Table 1. Sample frame units and samples sizes of the main study.

SN	Categories of Profession	Sample frame units	Samples	Sampling technique
		N	n	
1	Principals	90	84	Availability sampling
2	Mentors/experienced teachers	255	96	Simple random sampling
3	Primary schools' teachers	5977	370	Stratified sampling
4	Schools' CPD coordinators	30	7	Purposive sampling
5	CPD committee members	210	7 comm.(38)	Purposive sampling
6	Parents from PTA members	60	3	Purposive sampling
7	Cluster supervisors	45	7	Purposive sampling
8	Woredas' and admin TDP experts	7	7	Availability sampling
9	Zonal TDP experts	2	2	Availability sampling
10	Region education TDP experts	2	2	Availability sampling
11	MoE TDP experts	2	2	Availability sampling
Total		6680	618	

Data collection methods

The multiple data collecting instruments used in this study were questionnaires, interview, focus group discussion, observations and document examination. Regarding this, Creswell [35] suggested that employing multiple data collection tools help the researcher to strengthen inadequacies and ensure triangulation.

Pilot study

The pilot study was conducted mainly to get insights for establishing appropriate design and procedures for the main study. Pertaining to this, it is important to establish the internal consistencies like validity and reliability of the items for meaningful data collection process of the study [37]. Then, validity of the instruments was read, commented and checked by reviewers before undertaking a pilot study. Then, the reliability of instruments was $\alpha=0.836$. Then, improvements were made on few items of questionnaires and made ready for the final data collection.

Ethical practices

Ethical approval: Ethical approval for this study was obtained from the concerned bodies in Oromia regional state, Ethiopia to avoid the research misconduct because harm is narrated in the context of institutional characteristics, policies, procedures, guidelines and work environment [38]. Before distributing the instruments to the participants for data collection, permission was sought from education administration offices. Accordingly, Creswell [35] suggested that the respect has been shown by gaining ethical approval or the consent given by concerned bodies before entering a research site and by viewing oneself as a guest at the place of study.

Competing interest disclaimer: We have declared that no competing interest exists. The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge.

Methods of data analysis

The quantitative data were coded to the level of phrases for understanding, tabulated, presented and analyzed by using descriptive and inferential statistics, and the qualitative data were thematically narrated. Thus, descriptive statistics and inferential statistics were designed to make assumptions about the characteristics of wider population [36]. Descriptive statistics such as the mean was used to check the normal distribution of data, and the standard deviation measures the spread of data about the mean value. It is useful in comparing sets of data, which may have the same mean but a different range. Pearson correlation and a one-way-ANOVA are used to check the mean differences among respondents.

RESULT AND DISCUSSION

The influence of work cultures of schools or policy environment on teachers' participation in CPD practices. The data collected about school policy environments and teachers' engagements in CPD practices were analyzed by using person correlation, means, std. dev. and one-way-ANOVA.

Table 2 showed that the total factors of school policy environment and teachers' participation in CPD practices were strongly correlated (r=0.686). Practically, there were statistically significant positive relationships between factors related to school policy environments and teachers' participation in CPD practices which ranges from low to high level. The correlation coefficients between understanding of CPD goals and school work culture with teachers participation in CPD practices were (r=0.386, 0.428 & 0.449, p>0.05) respectively. This indicated the existence of linear positive relationship between variables.

Table 2. Correlation between school policy and teachers participation in CPD practices.

School policy environment	Correlations	Total_ factors	Participation in CPD practices
Total_ factors	Pearson correlation	1	0.686**
	Sig. (2-tailed)	0	0
CPD goals	Pearson	0.597**	0.386**

	correlation		
	Sig. (2-tailed)	0	0
Leaderships	Pearson correlation	0.588**	0.267**
	Sig. (2-tailed)	0	0
School culture	Pearson correlation	0.548**	0.449**
	Sig. (2-tailed)	0	0
Curriculum practices	Pearson correlation	0.556**	0.278**
	Sig,(2-tailed)	0	0
Class size	Pearson correlation	0.347**	0.256**
	Sig.(2-tailed)	0	0
Teachers' workloads	Pearson correlation	0.428**	0
	Sig,(2-tailed)	0	0.295**
Teacher-to-student ratio	Pearson correlation	0.520**	0.219**
	Sig.(2-tailed)	0	0
Note: ** shows the presence of linear positive correlation between the variables (factors).			

Though there was disregard, understanding of CPD goals and the school work culture were in a better perception and practices. Conversely, the correlation coefficients between leaderships, curriculum practices, class size, teachers' workloads and teacher-to-student ratio with their participants in CPD activities are (r=0.267, 0.278, 0.256,0.295,0.219, p>0.05) respectively. These coefficients indicate low relationships between the variables in the same direction. Thus, curriculum practices are not coherent with prior knowledge on which teachers' are doing CPD activities and leadership practices were not properly exercised regarding teachers' PD practices. Similarly, there was large class size in school (>50) and teacher to students' ratio was above quality standard (>1:50) set by MoE.

Table 3 showed that the mean scores of the three groups of respondents are found to be below the expected mean value. Relatively, the mean score of the principals was higher than others. The status of respondents' agreement indicates that factors of school policy environments like CPD goals, work culture, workloads, curriculum practices, leadership practices and class size adversely affected the execution of teachers' CPD practices.

Table 3. Mean and std. dev. of the influences of school policy on CPD practices.

Variable	Groups	N	Means	Std. deviation
The influences of school policy environment on CPD	Teachers	368	14.49	2.311

activities				
	Mentors	96	13.18	2.15
	Principals	84	16.91	2.611
	Total	548	15.231	2.389
*Note. Maximum expected mean=25				

Table 4 revealed that there was no statistically significant difference at the p>0.05 level of mean scores among teachers, mentors and principals (F(2, 545)=2.809, p=0.060).

Table 4. One-way-ANOVA on the impacts of school policy on CPD practices.

Sources of variations	Sum of Squares	DF	Mean Square	F	Sig.
Between Groups	161.431	2	80.715	2.809	0.06
Within Groups	15660.303	545	28.735		
Total	15821.734	547			
Note: Significant at p 0.05 level					

Horizontally, one of the interviewees reflected his professional experiences about factors that affected the executions of CPD activities in schools and cluster centers as,

I think CPD practices focus on routine activities that make teachers busy in schools. As the framework and practical toolkit are one-size-fits-all and the activities are infused with political expectations of 1 to 5, the differences were not achieved in teachers' classroom improvements. You know we are communicating on the challenges and importance of CPD practices with our colleagues working in different parts of the region during summer courses, vacation and other occasions. Thus, I underline that this program has brought many hardships to teachers rather than benefits them (IP12, 20/1/2020).

One of the participants highlighted that the influences of school work culture relative to CPD practices in the school she was working as,

I am sure that although there are virtuous working cultures among professional teachers, attention and curiosity were not given to CPD activities due to lack of awareness about its benefits. Particularly, the school principals are too careless to include CPD issues in school annual plans, supervision and job performance evaluation. This showed that there are poor lines of communication between teachers and principals concerning teachers' CPD policy and its practices (IP18, 01/2/2020).

The members of FGP7 team remarked about the quality of district leaders in planning, managing, organizing and implementing CPD prioritized needs through creating conducive learning atmosphere in schools.

Teacher, 'M' argued that my district leaderships are not proficient enough to create positive environment and positive working culture among participants of CPD program, and unable to treat professional needs properly among the government at national level, school level and personal teacher level which further leads to competition

of needs…..Similarly, teacher, 'J' reflected that I think the needs of the school dominate teachers' personal and professional needs. Thus, CPD practices provide insignificant contributions to foster the quality of teachers' competencies such as professional knowledge, skills, and practices required for classroom instruction (Date: 25/2/2020).

From observation of discussions, interview and document examination, the researcher witnessed that the average teacher-to-student ratio in the 2019/2020 academic year in most schools was found to be 1:84, and in some schools it reaches to 1:105. This workload forced the teachers to work in two opposite shifts so that this burden affected them undesirably to use the planned 60 hours per year for individualized and collegiality CPD activities. Such workload was a tiresome for teachers and overtook their extra times they were expected to use for CPD activities in the schools and outside the schools in cluster centers.

The findings showed that the school policy environments like communal understanding CPD goals, leadership supports, curriculum practices, schools work culture, workloads, class size and teacher-to-student ratio negatively affected the potential of changing policy into actions in sustainable duration of time. The contextual aspects such as the workplace environment and school supports may moderate the effects of PD program [5,39].The school is forced to implement teachers' CPD practices may not provide adequate professional engagements and technical support opportunities to change policy rhetoric into actual practices. Thus, the finding of the study matches with Desimone [40] who supposed the influences of contextual dynamics on professional development practices.

CPD needs among developmental areas and teachers' participation

Person correlation was used to evaluate the relationships of prioritized CPD needs among the three development areas and participation of teachers in CPD practices as,

Table 5 showed that the total CPD needs among the three developmental areas and participation of teachers in CPD practices were strongly correlated (r=0.629). On the one hand, the correlation coefficients between government needs at national and regional levels and teacher's personal and professional needs with their participation in CPD practices are (r 0=0.244 and 0.378, p 0>0.05). The correlation coefficients were small to medium. This indicates that the needs at national level have small association to participation of teachers in CPD practices. Besides, teachers' personal and professional needs have moderate association to teachers' participation in CPD activities. On the other hand, the correlation between schools needs and teachers' participation showed high correlation (r=0.569 at p>0.05). Teachers usually perform CPD based on the school's prioritized needs. There were statistically positive correlations between CPD needs among the three developmental areas and teachers' perceptions and participation in CPD activities.

Table 5. Correlation between developmental areas and participants in CPD practices.

CPD Needs	Correlations	Total_ CPD needs	Teachers' participation in CPD practices
Total_ CPD needs	Pearson correlation	1	0. 629**
	Sig. (2-tailed)	0	0
Government needs	Pearson correlation	0.685**	0.244**

	Sig. (2-tailed)	0	0
School needs	Pearson correlation	0.785**	0.569**
	Sig. (2-tailed)	0	0
Teacher needs	Pearson correlation	0.817**	0.378**
	Sig. (2-tailed)	0	0
Note. **shows the presence of linear positive correlation between the variables (factors).			

One of the interviewees reflected his understanding about the alignment and misalignment of CPD needs among the three developmental areas such as the national government, schools and personal teacher. One of the participants stated that,

I think that school CPD needs is perceived by teachers as something to address political aspirations. Because of lack of structural flow of communication, professional gaps were created on prioritization of needs among government, school and personal teacher. Even recently, the job evaluation and grading allowed country-wide for civil servants including teachers to improve their salary (basic need), yet it is not implemented on time. This situation hinders teachers' practices to address school needs which are different from their own professional needs related to specific lesson (IP18, 1/2/2020).

The other interviewee discussed about the challenges associated with CPD needs prioritization as,

I think teachers usually face challenges in line to the school's needs which forced them to do CPD on issues not related to their subject matter knowledge and classroom practices. For instance, teachers are doing both individualized and collaborative CPD on the challenges of school fence, toilets, shortage of water, and dropout. They have neglected the problems facing them in the classroom. The other serious challenge we are facing is the mismatch between the subject matter in which teachers graduated from college of teacher education and the subject matter they are teaching in school. This critical concern has made teachers to be carelessly participated in CPD practices (IP7, 05/3/2020).

Due to the responsibility taking paradox happened in the school system in order to develop capacity of teachers, there are tensions in addressing the needs of the government, schools and teachers. Most teachers were not able to diagnose their professional and personal needs. Thus, the CPD practices were not instructional content-focus to implement curriculum, instruction and assessment techniques. This finding contradicts with identification and prioritization of the first three basic needs to improve urgent problems associated with instructional practices in the school systems [41].

The influence of teachers' professional identity metaphors and dilemmas on CPD practices

Both descriptive and inferential statistics were used to analyze the influences of teachers' professional identity metaphors and dilemmas, and their subject matter, pedagogical and didactic expertise on their perceptions and practices of CPD and professional competency development.

Table 6 showed that the mean scores of all groups of respondents were found below the expected mean. However, the mean score of mentors was relatively higher than the others. This indicates that experienced teachers have

better agreement on the influences of TPI metaphors and dilemmas on teachers CPD practices. A one-way-ANOVA was further carried out to cross-check the mean differences among the three groups of respondents.

Table 6. Means and standard dev. of the influences of TPI on CPD practices.

Variable	Groups	N	Mean	Std. deviation
The influences of TPI metaphors and dilemmas and their expertise on CPD practices	Teachers	370	10.15	7.815
	Mentors	96	30.33	3.833
	Principals	84	27.33	3.533
	Total	550	15.296	4.43
*Note. Maximum possible mean score=45				

Table 7 showed that there was a statistically significant differences of mean scores among the three stakeholders (F(2, 547)=3232.645, p<0.05). It is difficult to identify which group differs; statistically pair-wise-comparison was necessarily made. Additionally, Scheffe's post-hoc pair-wise comparison of means was employed to know which pairs of means differ statistically from others.

Table 7. One -way-ANOVA on the influence of TPI on CPD practices.

Sources of variations	Sum of squares	DF	Mean square	F	Sig.
Between Groups	43110.6	2	21555.28	3232.645	0
Within Groups	3647.396	547	6.668		
Total	46757.996	549			
*Note. Significant at the p 0.05 level.					

Table 8 showed that the post-hoc pair-wise-comparisons indicated that the mean score of teachers' perceptions is significantly lower than the principals and mentors with mean differences of 17.183 and 20.183 respectively. Mentors and principals have favorably agreed and teachers have less agreement about the influences their professional identity descriptions on CPD practices. This reveals that teachers with different metaphors of professional identity status differently participated at different status to CPD activities to improve their professional competencies. The more they are 'proud of' their profession and understanding themselves as teachers, the more they actively participate in CPD activities helps teachers develop the right professional competencies and improve

classroom practices. But, such personifications were missed from primary schools teachers and negatively affected teachers' CPD practices.

Table 8. Post-hoc Scheffe's analysis result.

Stakeholders (I)	Stakeholders (J)	Mean Difference (I-J)	Sig.
Teachers	Mentors	-20.183*	0
	Principals	-17.183*	0
Mentors	Teachers	20.183*	0
	Principals	3	0.698
Principals	Teachers	17.183*	0
	Mentors	-3	0.698
*Note: Significant at the p 0.05 level			

Pertaining to the status of alignments between TPI descriptions and CPD practices, the salary scale of teachers is put on the second grade as compared to horizontal salary scale of other civil servants. Concerning this relationship, the interviewee further reflects the influences of TPI metaphors on the efficacy of CPD practices concisely as,

Actually, I am a teacher, and I personally love my profession. But, when I evaluate myself as a teaching professional, I doubt to say that I am a teacher though I am in a position of expertise compared to other classical professionals' life. Economically, it is difficult to compare myself with professionals having equivalent qualification in other disciplines with me. Even, currently, teachers are not able to fulfill their basic needs. Therefore, teachers have no any worries about the implementations of their CPD activities to update and develop their professional competencies (IP9, 12/1/2020, p.361).

Besides, participants of FGP7 team members confirmed about many problems associated with the constructs of teachers' professional identity profiles and their impacts on implementation of CPD activities. The participants separately raised their feelings as;

A teacher, 'Z' reflected that teachers are the major victims of economic inflation and unable to fulfill basic needs in that we are afraid of being stay in the teaching profession. Although we lack professional values and prestige, we are producing citizens who will build the nation and provide ultimate social services to society at large. The long professional experiences we witnessed that are hindering humiliations in respect of the life of teachers working in primary schools from the members of the society. These social values influence their perceptions and practices to improve their classroom practices. Teacher, 'J' suggested that we are neglected economically by the society. The educated ones are minimizing teaching profession by estimating it as something better than jobless in terms of prestige, salary, motivation or rewards. Thus, teachers are hopelessly doing CPD activities to improve their professional practices (Date: 04/3/2020).

TPI metaphors influence their perceptions and participation in CPD practices and professional competency development in that well motivated teacher possess positive tendencies and loves towards their PD practices. However, these epitomes were missed from the professional development activities in many primary schools due to teachers' professional dilemmas. However, Day and Sachs [42] suggested that one of the imperatives of teachers' CPD is to improve prestige of the teaching profession. Thus, the more teachers are being engaged in their CPD activities, the more they love and proud of their profession. Hence, the more teachers are proud of their profession, the more they will develop professional competencies required in the classroom and the school system.

Relationships between TPI descriptions, CPD practices and professional competencies

The person's correlation was used to determine the relationships among different teachers' professional identity descriptions, perceptions and participation in CPD activities and professional competency development.

Table 9 showed that there were statistically significant positive correlations among TPI, CPD practices and professional competency development. The total TPI has strong correlation with teachers engagement in CPD practices and competency development (r=0.548 and r=0.607, p>0.05) respectively. This indicates that teachers with high professional identity metaphors have high levels of participation in CPD practices, and at the same time develop better professional competencies. Teachers with different sense of professional identity have different strength of associations with their engagement in CPD practices ranging from (r=0.145 to 0.289, p>0.05); small strength of association between engagements of teachers in CPD activities and develop different professional competencies ranging from (r=0.198 to 0.397, p>0.05) which is small. The correlation coefficients between teachers professional commitment and participation in CPD activities (r=0.289, p>0.05). Likewise, the correlation coefficient between teachers' professional readiness and competency development (r=0.397, p>0.05) is relatively medium.

Table 9. A summary of correlation between TPI descriptions and CPD practices.

TPI Metaphors	Correlations	TPI_Total	Engagements in CPD practices	Competency development
TPI_Total	Pearson correlation	1	0.548**	0.607**
	Sig. (2-tailed)	0	0	0
Readiness	Pearson correlation	0.514**	0.267**	0.397**
	Sig. (2-tailed)	0	0	0
Responsibility	Pearson correlation	0.489**	0.185**	0.245**
	Sig. (2-tailed)	0	0	0
Commitment	Pearson correlation	0.554**	0.289**	0.297**
	Sig. (2-tailed)	0	0	0
Values &	Pearson correlation	0.643**	0.145**	0.198**

prestige				
	Sig,(2-tailed)	0	0	0
Note: ** shows the presence of linear positive correlation between the variables (factors).				

Although the correlation coefficients showed positive relationships, due to adverse metaphors of teachers' professional identity as professionals, teachers' participation in CPD activity is small. The associations between teachers' metaphors of their professional identity and the position of professional competency development were low. Thus, they can't be professionally competent enough to improve students' learning outcomes as well. This indicates the linear or symmetrical relationships between the two variables. Therefore, the higher the correlation between TPI metaphors and teachers participation in CPD practices, the more the influence of each TPI metaphor on CPD practices in schools.

Similarly, participants of FGP4 team members broadly mirrored out about the influences of teacher professional identity metaphors on CPD activities such that,

A teacher, 'W' summarized his feelings that the professional values, benefits and prestige given to teachers in our settings are not motivating teachers to actively participate in CPD activities. Some teachers are privately attending education to join other professions not due hating the profession but to get enough salary and other professional payments to fulfill basic needs for their families. Besides, teacher, 'O' revealed that TPI is being threatened in all corners of their lives by many factors due to lack of individual and collective professional autonomy to make decisions on professional duties. Further, a deputy principal, 'K' supposed that we are reached to a time when becoming a teacher is perceived by the society as something better than being jobless as the 2nd choice. Teachers are not proud of teaching profession as their first choice. This situation affected professional readiness and commitments of teachers. Teachers are not eagerly participating in CPD practices to improve professional competencies (Date: 11/1/2020).

Even if there is better self-understanding of teachers on teaching profession, there were weak metaphors and reflections on their professional identity. The dilemmas in teaching profession are associated with the difficult nature of teachers work realities and deteriorated lives. Teachers with strong sense of professional identity love to their profession and actively participate in CPD practices. Thus, they develop the professional competencies required for classroom practices. However, the findings show that the relationships between variables were small in that teachers lack positive metaphors on their profession and didn't give attention to their CPD practices to develop their professional competencies.

This finding corresponds with the assumptions of prior researchers i.e., teachers' professional identity is influenced by professional, social and policy expectations of what a good teacher is and society expectations and interactions between educative contexts [43]. Moreover, professional development agency is practiced when teachers in schools influence and make choices that affect their works and their professional identity [44]. Teachers interact with and within a specific context to make professional decisions, take initiative and act proactively rather than reactively to reach certain destinations. However, the distinct aspects of teachers as subject matter or pedagogical expertise affect their specific professional needs. The missing of strong practices from the contexts of primary schools

affected teachers' commitments and transparency to execute CPD activities to acquire knowledge and skills required for classroom practices.

Evaluation of CPD support systems in schools

In the analysis of the data collected about evaluation of the support systems (technical, professional and material assistances) to teachers' CPD practices like mentoring relationships, monitoring, supports and constructive feedback, means and standard deviation were used. Moreover, a one-way-ANOVA was further used to find out possible variations of means of perceptions across the three groups of respondents.

Table 10 showed that the mean scores of all respondents are found to be below the expected mean. So that respondents have unfavorable agreements on professional, technical and material supports provided to teachers' CPD practices. A one-way-ANOVA was employed to check statistically significant difference between the means of respondents.

Table 10. Means and Std. dev. of professional, technical and material support systems.

Variable	Groups	N	Mean	Std. deviation
Professional, technical and material support to teachers' CPD practices	Teachers	367	18.32	3.352
	Mentors	92	20.44	2.544
	Principals	82	16. 15	2.859
	Total	541	18.304	2.91
Note: Maximum expected mean=35				

Table 11 showed that there was no statistically significant difference at p>.05 level in mean scores for the three groups of respondents (F(2,539)=1.929, p=0.166). Therefore, respondents were not satisfied with the professional and technical supports offered to teachers' CPD practices. Principals, mentors and supervisors were not effectively, mentoring, monitoring and creating conducive learning milieu. The other categories of participants scrutinized professional development support system from the points of mentoring, monitoring and on constructivism feedback given to teachers as,

Mentors, principals and supervisors are not capable to advice, monitor, and follow-ups and give feedback to their teachers on professional learning practices. I want to assure that because of weak communication lines, lack of reflections and collaboration among professional learning groups at department level, teachers are not able to improve their professional competencies by themselves or without the supports of mentors, peers and leaders in the school community. Thus, the culture of learning in groups through practices and experiences are not well known

and lack continuity due to lack of sense of belonging about their collegiality professional learning at the department level (IP12, 28/2/2020).

Table 11. One-way-ANOVA across the three groups on the support system.

Sources of variations	Sum of Squares	DF	Mean Square	F	Sig.
Between Groups	188.432	2	94.216	1.929	0.166
Within Groups	26325. 849	539	48,842		
Total	26514.281	541			
Note: Significant at the p .05 level.					

The findings indicated that the new professional competencies teachers' learned from CPD practices were not evaluated by the schools, and the status of their application in improving their classroom practices were not kept in their portfolios. This finding contradicts with the finding of Mizell [45] who stated that learning during the school year make it easier for educators to apply what they learn immediately within their work places so that students benefit immediately. Guskey [46] discussed that CPD practices are related to changes into practices based on participants' use of new knowledge and skills acquired from CPD practices. It is essential to evaluate whether participants were using the learned new knowledge and skills. This allows participants to practice and assimilate new methods and skills gained from professional development practices into instructional system [47]. Thus, CPD practices support teachers' motivation and commitments to the learning process [48].

Educators who are responsible for organizing teacher professional development practices have had no formal education in how to do it [46], the support systems offered to teachers from the points of mentoring, monitoring, follow-ups and feedback by mentors, coaches, principals, supervisors and expertise were not sufficient enough to maintain quality of CPD practices in schools. Specifically, coaching practice and research are situated in the field of teacher professional development [49] as one effective component needed to develop teachers' knowledge and skills. The finding of the study matches with the findings of Abraham, [50] who identified that the lack of trained mentors, and Dawit, Dawit and Anteneh [51] who suggested that the lack of well-trained mentors and structural feedback are challenging CPD practices. However, collaboration with fellow teachers and receiving feedback from them facilitate professional reflections, assist learning practices and provide opportunities of changing teachers' practices at school level [52].

Summary of major findings

This research highlighted the following gaps. These are:

1. CPD key stakeholders have no common understandings on theoretical and conceptual underpinnings of the program.

2. Teachers' CPD practices lacked instructional-contents focus to improve content knowledge and pedagogical skills. They were ineffective to bridge the gaps between curriculum and its actual practices in the classrooms.

3. Teachers were not effectively sharing their accountability schemes due to lack of belongingness and commitment of their continuous professional development practices.

4. The status of teacher's professional identity (knowing oneself as a teacher), weak professional dispositions, poor attraction of teaching as a career, lack of prestige and value, motivation and awards, negatively influenced their professional development practices in schools.

5. The lack of teachers' digital literacy due to the absence of ICT utilization in schools for CPD practices.

6. The lack of systematic professional, technical and material supports by educational leaders and experts were handicapping the implementation of program.

7. Perplexing challenges such as lack of conducive school policy environments or work cultures like leaderships, curriculum practices, job dissatisfaction, and lack of strong professional identity metaphors were observed in pertaining to CPD practices in schools.

CONCLUSIONS

Knowing the success and challenges of teachers' professional development practices under the work cultures of schools or policy environments like leaderships, curriculum practices, taking responsibility for granted and commitments strongly affected teachers' CPD in schools and cluster centers. Provisions of professional motivation or reimbursement, career growths either vertical increments or horizontal adjustments of salary to teachers or to the positions of educational leaders such as principals, supervisors and TDP experts depends on experiences, qualifications and political naive rather than competencies they learned from CPD activities. The status of teachers' participation in CPD practices decrease as one goes upward along the career ladders due to dissatisfaction of teachers on the teaching profession in terms of salary adjustments, motivation and rewards and professional prestige. Most teachers were not capable to diagnose their professional and personal needs. Teachers' CPD practices entirely depend on the prioritized needs of schools. Thus, teachers were placed at peripheral positions of competency development through CPD practices to develop professional competencies required in the classrooms.

Teachers with strong metaphors of professional identity and distinct aspects of their subject matter, pedagogical and didactic expertise have strong passions towards their profession, and actively participate in CPD practices to develop professional competencies required for classroom practices. This is the policy expectation of what a good teacher is. But, teachers are in professional dilemmas that they lacked positive images on their profession and professional goals, lack ambitions and lack of focus on CPD practices. The professional dilemmas in teaching are associated with lack of professional accountability system, lack of professional values and compensation though the salary scale of teachers is politically publicized and put on the second grade. Therefore, experienced high status

teachers have developed weak metaphors of professional identity, revealed low participation in CPD practices and owned low professional competencies. Thus, teachers are in a position of preference to either leave or change occupation, which in turn has negative impacts on the efficacy of teachers' CPD practices.

The success of CPD practices is strongly influenced by the status of participants such as the learner and provider and targeted professional competencies learned from CPD activities. However, there were participants' reactions against CPD practices that challenged its importance by assuming that it is something politically intended to make teachers' busy in schools. The school and expert supports provided to teachers CPD practices are important in realization of the program. Popular and successful leadership's capacity draws particular consideration to change of policy into actions, improve instructional process and adequacy of resources to accelerate teachers' professional competencies and careers. Nevertheless, most educational leaders were politically affiliated, less motivated and committed to create conducive learning environments like adjusting workshops and CPD meetings to evaluate individualized follow-ups, coaching, mentoring, reflections and feedback systems.

RECOMMENDATIONS

The following suggestions were forwarded for further actions. These are:

1. The key stakeholders should develop communal understandings on theoretical and conceptual underpinnings of school's dynamics challenging the implementation of CPD program activities.

2. Teachers' CPD practices in primary schools should be in job-embedded and continuing process. Thus, it should focus on instructional-contents to improve teachers' classroom practices and students' learning outcomes.

3. Teachers CPD practices should bridge the gaps between curriculum and its actual practices in the classrooms.

4. Teachers should be professionally accountable, committed and responsible to their profession to develop their own tripartite professional competencies required in the classrooms.

5. The status of teachers' professional identity (understanding oneself as a teacher), attraction of teaching as career, motivation and other reimbursement should be improved through CPD practices in schools.

6. Systematic professional, technical and material supports should be provided to teachers' CPD practices by concerned bodies like regional education bureau, districts' education office and schools.

7. The school policy environment or work cultures should be conducive for the effectiveness of CPD practices. It should focus on teacher's career growths; job satisfaction, prestige, values, motivation, awards and reimbursements which further contribute to improvements of student's learning outcomes.

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