School-Based Continuous Teacher Professional Development: 
An Investigation of Practices, Opportunities and Challenges

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Abstract
A Likert-type self report questionnaire meant to examine opportunities and challenges in practicing the Continuous Professional Development (CPD) program was pilot tested and administered to 300 randomly selected primary school teachers in Addis Ababa City Administration. Male tend to use self reflection techniques more than female to improve their career development \((t=3.85, p < 0.00)\). The mean score for teachers teaching at the second cycle was found to be statistically higher than the mean score of teachers working in the first cycle of primary education \((t = 3.24, p < 0.00)\) indicating that teachers in the second cycle tend to use peer discussions, self-assessment of one’s own daily routines, and use of portfolio more often than their counterparts teaching in the first cycle. The mentoring process stood as the number one contributing factor for teachers’ professional development \((29.1\%)\) followed by action research \((28.8\%)\) and school in-house workshops \((27.8\%)\). Lack of knowledge and experience on the theoretical underpinnings, implementation inconsistencies, lack of budget to run the program at school level, lack of incentive to recognize teachers who make utmost efforts to change themselves and their colleagues were major problems identified from the qualitative data. Despite these problems, the new CPD has entailed a number of opportunities and useful experiences in terms of empowering school teachers and ameliorating school based problems related to the teaching learning process. Future implications are also suggested.

1. Introduction

1.1 Background for the Study

The crucial role education plays in a society has become a universal understanding. At the individual level, it enhances citizens’ capacity to make informed choices about matters important to their welfare. It is also a well established thought that education is the most important contributor to higher lifetime earnings and stronger national economic growth.

For education to play these roles effectively, it has to meet minimum quality standards. Among other conditions, it is strongly argued that universal goals set for education in terms of access need to be accompanied with quality instruction. This in turn requires teachers to be qualified to do the job effectively. For instance, in the primary schools, students’ opportunity to master basic skills that will serve them as a foundation for further education and as means
to realize their aspirations as human beings, among other conditions, depends on teachers’ professional quality.

The Ethiopian government is committed to the social, economic and cultural transformation of the people. This is reflected in the Education and Training Policy (TGE, 1994) and Education Sector Development Programs focused on expanding educational opportunities and increasing access to all levels of education, strengthening and improving the quality of education. Emphasis is also given to expand and make available educational opportunities to those in the rural and remote areas as well as to the urban poor.

In the current Ethiopian context, educational expansion is taking place steadily at all levels and as a result there is an indication that quality is being compromised. The national assessment results of 2000, 2004, and 2008 (MOE, 2000, 2004, and 2008) indicate that, in many schools, children are not mastering basic skills, and low achievement is widespread. Results of the second national learning assessment showed that the composite achievement results at the national level for both grades 4 and 8 were less than the expected minimum standard set by the Ministry of Education (MOE, 2008).

There is now serious concern among different stakeholders about the quality of education. The government is doing its best with limited financial resources to address the problem. Thus, parallel with the rapid expansion of the education system, the government called for improving the quality of education by introducing several packages such as the school improvement program (SIP) which among others includes teacher professional development together with the employment of a learner-centered approach. Teachers are expected to employ interactive methods of teaching to help students learn.

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 learners and society. This situation signifies the importance of continuous teacher professional development aiming at improving the teaching-learning process thereby improving the quality of education. Teachers are expected to employ interactive methods of teaching to help students learn. The literature on education quality indicates a strong link between teacher professional development and quality especially in the areas of “teachers’ beliefs and practices, students’ learning and on the implementation of educational reforms” (UNESCO, 2006, p. 71).

Despite the concerted efforts by the government, improving the quality of education while at the same time keeping up with the expansion of the education program has become a challenge.

The notion of continuous teacher professional development is rooted in the constructivist philosophy which claims that our constructions and views of the world are not stable, but are in continuous change as we build on past experiences. Accordingly, it is presumed that teachers have to engage themselves in planning their own professional development on a continuous basis to cope with the continuous change.
1.2 Statement of the Problem

Ethiopia has made extraordinary achievement in expanding education at all levels of the system. However, it seems that this unprecedented achievement in terms of students’ enrollment did not meet quality standards. Quality of education has become a serious concern among all stakeholders including the government. In response to this pressing issue in the educational sector, the Ministry of Education has introduced and is implementing the General Education Quality Improvement Program (GEQIP). Its aim is to promote education quality to ensure the gains in access do not compromise the quality.

One of the principal pillars of GEQIP is the Teacher Development Program (TDP II). TDP II is a key strategy in enhancing the quality of both pre-service and in-service teacher education. This in turn is unthinkable without proper teachers’ knowledge, skills, and behavioral and attitudinal changes. The outcome of teachers’ professional development is ultimately gauged by the benefit and changes it brings to students’ learning.

A review of the performance reports of TDP I and TDP II showed strong achievements as well as certain shortcomings both at policymaking and implementation levels. Evidence documented from research conducted by universities, reports compiled from field visits and impact studies by the Ministry of Education showed that the TDP program in general and CPD in particular have brought promising changes in terms of the target set for the projects life span, despite the problems that demanded attention. Achievements registered and problems encountered are linked to structural (organizational) arrangements, readiness to implement the program by all stakeholders, and impact brought on by the program measured against the Objectively Verifiable Indicators (OVIs) indicated in the log frames of the programs. In response to these problems, the MOE has worked out a new toolkit for effective implementation of school based continuous professional development (CPD) at school levels.

Thus, the purpose of this study is to examine the programs, efforts, major achievements, challenges and prospects of school based teacher professional development as per the new CPD program in selected schools in the Addis Ababa City Administration. The study focuses on examining the views and experiences of teachers, CPD committee members in the respective school and pertinent education officers to creating opportunities for teacher professional development at the school level. Efforts shall also be made to identify supportive provisions in place, programs developed, results obtained, challenges and weaknesses observed in connection to the new CPD program.

1.3 Objectives of the Study

The general objective of the study was to identify issues, achievements and challenges observed in the implementation of the new CPD program in schools. More specifically, the study aims at:

1. Examining the views and perceptions of teachers, CPD committee members and vice principals in charge of CPD programs about the school-based teacher professional
development program.
2. Investigate the relationship between CPD process variables and teachers’ demographic variables such as gender, career structure, qualification levels, and work experience.
3. Identifying provisions that are in place to support CPD efforts at the school level.
4. Identifying programs and procedures that are in place to implement CPD in schools.
5. Finding out the major results obtained through the school-based CPD development program.
6. Examining major challenges and weaknesses observed in implementing a school-based teacher professional development program.

1.4 Research Questions
The following research questions were formulated to guide the study toward finding solutions to the problem.

1. How do teachers and CPD committee members perceive the purpose and importance of school-based teacher professional development?
2. What relationships exist between the different demographic groups and teachers’ perception of the process aspects of CPD?
3. What provisions are in place to support teacher professional development efforts at the school level?
4. What programs and procedures are in place to implement teacher professional development at schools?
5. What are the major results obtained through school-based teacher professional development in terms of influencing change and improvement in teachers’ practices?
6. What are the major challenges and weaknesses observed in implementing the school-based teacher professional development program?

2. Review of Related Literature
2.1 Conceptualizing Teacher Professional Development
The new education and training policy addresses equity, quality and efficiency as major issues of the Ethiopian educational system. However, teachers’ development is an essential element to bring meaningful change in these areas. The provision of quality education and the overall improvements in the school system are strongly linked to the development of teachers and other school personnel and their aspiration to advance in their career.

Despite the variations in context and the methodology adopted in planning teachers professional development programs Griffin, 1983 (cited in Guskey), the common denominator in conceptualizing teachers professional development appears to be linked with the process of altering the professional practices, beliefs, and understandings of school teachers toward
an improvement of student learning. As stated by Guskey (2002), “professional development programs are systematic efforts to bring about change in the classroom practices of teachers, in their attitudes and beliefs, and in the learning outcomes of students.”

Contextual factors govern the choice of teacher professional development programs and strategies. The engagement in the program is driven by the urge to be a better teacher. Conceptualizing this avenue as leading to professional growth in the job and increased competencies entails in professional satisfaction (Huberman, 1995 cited by Guskey, 2002).

Some research work in the Ethiopian context indicate the relationship between interest in teaching and prospects to advance in the profession. Aklilu (1967) as cited by Tesfaye and Demoz (2004) showed a high attrition rate of teachers from the teaching profession attributed to lack of hope for career advancement. A study by Tesfaye and Demoz (2004), on the attitude of teacher education students toward their future profession also showed a lack of future prospects for professional advancement as an important reason that discourages students from joining the teaching profession. A multiple comparison test for the mean rankings of the reasons that discourage a teaching career showed “less chance for career advancement” as an important concern to the would be teachers.

2.2 Teacher Professional Development and Student Learning

Increased competencies and professional effectiveness as perceived by teachers is ultimately measured by the extent to which teaching enhances student learning. Citing various sources Guskey (2002, p.382), for example, stated that “regardless of teaching level, most teachers define their success in terms of their pupils behavior and activities, rather than in terms of themselves or other criteria.”

The end result is to be successful in student learning outcomes; the knowledge and skills obtained from teacher professional development play an instrumental role in mitigating problems encountered in the day-to-day professional life of teachers. Moreover, the effect on student learning outcomes through teacher professional development can be realized when teachers’ attitudes and perceptions regarding their role and profession are changed. Teacher professional development is an ongoing process in which teachers learn from their success and failures and eventually modify, shape their classroom practices and their own way of thinking and belief systems. These two aspects of teacher professional development feed each other and are triggering forces to bring change and development in their profession.

2.3 Models of Teacher Development Programs

CPD is said to have been coined in the mid-1970s (Gray 2005). Its notion is rooted in the constructivist philosophy which claims that a person’s constructions and views of the world are not stable, but are in continuous change. Accordingly, it is presumed that teachers have to engage themselves in planning and executing their professional development on a continuous basis to cope with continuous change. In this regard, Amare and Temechegn (2002) noted that teacher development is an essential component of overall activities related to equity, quality,
relevance and efficiency in the educational system.

According to Griffin as cited in Gray (2005), CPD embraces the idea that individuals aim for continuous improvement in their professional skills and knowledge, beyond the basic training initially required to carry out the job. In teaching, such development used to be called ‘in-service training’, or INSET, with the emphasis on delivery rather than the outcome. Similarly, CPD is viewed as the professional growth a teacher achieves as a result of gaining increased experience and examining his or her teaching systematically (Villegas-Reimers, 2003; Institute of learning /IfL 2009). A number of models have been in use to address research in teacher professional development. Some of these models are discussed below.

2.3.1 The Change Model

The focal aspect of teacher professional development programs regardless of the models upon which they are constructed appears to be change. The tri-dimensional aspect of the change process includes teachers’ classroom practices, change in teachers’ attitudes and belief systems and change in the learning outcomes of students (Guskey, 2002). The relationship between these elements, the order in which program owners prioritize and whether or not these change dimensions reciprocate with each other have theoretical and practical implications in the conceptualization of a teacher professional development program. Guskey (2002) suggested an alternative model of change in which he argued that attitudinal and belief changes are outcomes of teacher sensitivity to classroom practices and their ability to use new curricula materials to bring out change in student behavior.

Guskey (2002) further argued that experience based classroom practice should attitudinal and belief changes. Knowledge results from day-to-day learning experiences and evidence obtained with regard to cognitive, affective and skill changes observed in students’ behavior are building blocks to bring sustained change in teachers’ attitudes and belief systems.

Research evidence that support the usability of this conceptualization in explaining teachers’ professional development are documented in the work of Guskey (2002). In his review of empirical findings, it was described that teacher commitment to their profession increases after they are exposed to innovative ideas and principles about teaching and their active involvement in practicing these ideas in the classroom. An exemplary work by Huberman (cited by Guskey, 2002), for example, showed that teacher anxiety and confusion gradually dropped, an understanding of the structure and rationale of the innovative instruction program grew, and mastery was achieved indicating the precedence of behavioral change to changes in attitude and belief systems.

Guskey’s teacher change model seems to contradict the commonly held view that implementation of new practices in teaching are consequential of the change process in teacher attitudes and beliefs over changes in teachers’ classroom behavior. According to Guskey (2002), three basic principles stood out from the model of teacher change. The first principle that stemmed from the model recognizes change as a gradual and difficult process for teachers. The implication of this principle is that any change in the human enterprise is likely to induce
resistance and demands more expenditure of time and energy to meet the requirements of the new setting. In spite of that, teachers might be resistant and show unwelcoming behavior to the new change program or innovation. And it is unrealistic to think human behavior devoid of the setting in which the behavior is elicited. Furthermore, the same environment might not equally affect the participants. Hence, new programs and innovative practices of teacher professional development should take into account situational and contextual factors. A balance has to be maintained between school based situations at the micro level and broader socio-cultural factors prevailing at the macro-level. Striking the balance between these two contexts calls for active collaboration between teachers, program developers and policy makers at large. Top-down professional development programs that ignore the teachers’ role at all phases of the program will result in reluctant behavior or program failure.

The second principle attaches due weight to the relevance of uninterrupted provision of “regular feedback” on student learning progress to teachers. A mechanism has to be in place to ensure the continuous flow of information about the level of student learning progress. The argument is that regular feedback obtained from students’ progress reinforces the sustainability of the desired behavior. Continuous assessment and monitoring of the effectiveness of teaching not only strengthens the behavior but also helps to devise an early intervention mechanism to correct errors. Knowledge of student perception of the teacher performance level of a new program enhances the formation of positive attitudes and beliefs towards these new programs.

The third principle discerns the importance of providing continued follow-up and support for the sustainability of the change process and the gradual empowerment of teachers in the professional development program.

The support network available to teachers in and out of the school environment reduces feelings of incompetence and broadens the tolerance level of teachers. Moreover, the support system builds-up one’s confidence and mutual understanding and help among all stakeholders involved in the professional development program.

2.3.2 Pedagogical Versus Subject Area Model

Quality education and the critical role played by teachers in maintaining quality is outlined by many researchers. The affective aspect of teacher behavior demonstrated in their attitudes, beliefs and perceptions in influencing the learning environment is an important input toward quality education. An inter-case analysis of teacher and principal perception of quality in four regions of Ethiopia showed teachers to be critical resources in the delivery of quality education. Accordingly, both principals and teachers stressed the need for qualified teachers who have appropriate subject knowledge and pedagogical skills (Amare et al., 2006).

The modalities upon which pre-service and in-service teacher development programs are organized and carried out emanate from conceptualizing teaching as a science or art. Despite the dichotomy in conceptualizing teaching as a science and teaching as an art, teacher education programs are meant to develop teachers professional competencies through pre-service and in-service strategies and through the use of short-term or on the job induction programs.
The hard line that separates teacher education as the acquisition of skills and knowledge through pre-service training versus a socially constructed activity as defined by Dawit and Alemayehu (2001), is getting blurred. Instead a blend of the basic tenets of these two perspectives is gaining wider acceptance. The for and against dichotomized arguments for attributing teaching are implicated in curricula and teacher development programs. In the Ethiopian context, for example, methodology versus subject-content mastery has been a major theoretical paradigm in shaping teacher education programs.

Reviewing various sources Dawit and Alemayehu (2001) described the contribution of professional and subject area courses to teaching effectiveness. While some research findings demonstrated the supplementary nature of the two, others found the relative increment of teaching effectiveness in subject area knowledge.

2.3.3 The TICKIT Model

Ehman, Bonk and Yamagata-Lynch (2005) developed a model of teacher professional development that integrates technology with the multifaceted activities that are accomplished individually and on a group basis in school settings by teachers. The model development starts from identifying basic characteristics and principles of teacher professional development that incorporates the following components:

- Professional development activities ought to be situated in the classroom;
- Teams of two to four teachers from the same school;
- Professional development activities ought to incorporate a constructivist learning approach;
- Participant teachers ought to engage in conversation and reflections regarding their teaching practices, their students, learning theories, technology, and how their teaching practices can be changed;
- Teacher participants need to be provided with support after they finish the program.

The model was primarily developed from longitudinal experience gained from an experimentally designed teacher professional development approach which they named as the Teacher Institute for curriculum knowledge about Integration of technology (TICKIT). Program owners in collaboration with Indiana University worked with 133 teachers representing 18 school systems in which the entire project was handled in phases which ended up with support given to teachers to integrate technology into the classroom.

The program was structured in such a way that teachers become part and parcel of the project both as practitioners of components at all phases and taking leadership roles. The structural components of the program included activities such as enrollment in graduate program courses, completion of semester based reports, exchange of experiences learned from the innovative curriculum technology, attending workshops and web-based conferencing on progresses made and other activities.
The basic tenets of the TICKIT program model are the changes experienced by stakeholders, in teacher profiles such as prior knowledge, skills, confidence, motivation, and beliefs and ultimately improvement in the quality of student learning.

A number of benefits were reported from the TICKIT project. The innovative project helped to increase teacher competencies without necessarily enrolling teachers in a formal campus-based course system thereby strengthening the university-school relationship. It also opened opportunities for teachers to play a leadership role in the school system. The infusion of technology into the curriculum apart from making use of learning technology, created an environment in which TICKIT teachers would share their experiences with their colleagues, the university staff and graduate program students enrolled in the hosting university (Ehman, Bonk, & Yamagata-Lynch, 2005)

2.4 Teacher Professional Development in the Ethiopian Context

The teacher development program in the Ethiopian context was a national intervention program run by the Ministry of MOE and supported by six European countries with the intent of enhancing the quality and effectiveness of teacher education through priority programs namely teacher education, pre-service teacher training, in-service teacher training, teacher system overhaul (TESO), the Leadership and Management program (LAMP), and an English improvement program (ELIP).

This national program had involved eleven educational Bureaus (REBs), teacher education institutions (TEIs), and nine Universities as implementers with their students, teachers, and other staff as beneficiaries (MOE, 2007; MOE 2008). The purpose of this national project was to improve the knowledge, skills, qualifications and attitudes of primary and secondary school teachers setting objectively verifiable indicators (OVIs) and target outcomes for the above priority program areas. The target outcome for the in-service continuous professional development priority area as stated in the log frame was “pedagogical knowledge and capacity of teachers improved” (MOE, 2007).

The professional development action plan that spanned for the period of October 2008-September 2010 coined continuous development of teacher professional capacity with quality education to ensure maximization of pupils learning and achievement (Education program and teacher education department program development: Action plan October 2008-September 2010). As outlined in the action plan document, the specific objectives and expected outcomes were to:

- enable teachers to be active participants in the program, by helping teachers understand the need for professional capacity building and create positive views
- enable teachers to acquaint themselves with recent changes and developments through continuous capacity building;
- ensure a successful teaching and learning process in all schools;
- ensure that learning and achievement is maximized for all pupils;
make teachers benefit from their accomplishments through licensing, renewal and promotion processes (p. 5)

The expected outcome of the program for teachers was to maximize learning and achievement for every pupil. To this end a specific expected outcome was that all teachers display professional competency, as they develop a positive attitude towards the program and use modern information sources. It is expected that:

- good human relations are established in schools, and teachers develop a culture of learning from each other and helping each other;
- teachers have taken the initiative to develop their profession;
- teachers have used teaching strategies that encourage students’ problem solving capacities, talents and tolerance;
- the learning experience and achievement are maximized for every pupil;
- teachers solve local educational problems through research conducted individually or with others (p. 5)

The avenue to achieve these objectives and expected outcomes includes a two-year induction period in which the novice teacher was expected to complete four training modules followed by sixty hours of professional development activity per year that addresses sub-city, school, and national priority agendas.

The first phase of the teacher professional development program that extended through 2007/2008 was not without pitfalls and shortcomings. A review of its implementation status at national and regional levels urged for a redesigning of TDP II, to make a shift from a “teacher education system implementation design” to a “teacher education system quality improvement design” emphasizing ‘increased teacher effectiveness’ as its major objective (EPTED Action plan October 2008-September 2010). The TDP II program which organized itself along pre-service and in-service components was redefined in the action plan document as follows:

*TDP II defines improved teaching methods as those methods with extensive support in the mainstream scientific, peer-reviewed literature and which have been shown to be strongly correlated with increased student learning. This type of method has been broadly termed evidence based method of instruction and evidence based learning (EPTED, 2010, pg. 23).*

The TDP in-service quality improvement wing was basically concerned with increasing the existing teacher education graduates and teacher educators knowledge, skills and attitudes within the school system, cluster resource centers and Teacher Education Institutions (TEIs). The sub components that make the cornerstone for the in-service quality improvement program include: continuous CPD, English Language Quality Improvement Program (ELQIP), and Upgrading the career ranks of teachers.
An analysis and implementation plan document produced by the Teacher Development Advisory Team (MOE, 2007) argued that Teacher Competency Standards at different career levels provide a foundation on which all other teacher training related activities should be based. Re-licensing of teachers and climbing the next career ladder in the competency standard scales require teachers to pass through CPD program courses. The advisory team document for example discusses the dialectical relationship between teacher competency standard initiatives and CPD and how these two aspects of the teaching profession eventually determine the success and personal lives of teachers. It states:

*In as much as the Teacher Competency Standards document refers to required percentages of achievement of competencies under each of the three Phases for each grade of teacher, it would seem that the Teacher Competency Standards initiative is a detailed continuation of the CPD plans of Licensing and Re-licensing, with consequent implications for teacher promotion and pay. If this is indeed the MOE’s intention, this should be clearly stated. However, it may be that the Teacher Competency Standards system is only intended as a means to support teacher self-assessment, management of assessment of teachers and to assist with the identification of teacher training needs under CPD (p.4)*

A review of the performance reports of TDP I and TDP II showed strong achievements as well as certain shortcomings both at policymaking and implementation levels. Evidences documented from researches conducted by Universities, reports compiled from field visits and impact studies by MOE showed that the TDP program had brought promising changes in terms of the target set for the projects life-span despite the problems that urged for attention. Achievements registered and problems encountered were linked to structural (organizational) arrangements, readiness to implement the program by all stakeholders, and impact brought up by the program measured against the OVIs indicated in the log frames of the programs.

The Haramaya University study for example, indicated that the structural set up was absent or inadequately organized in most of the schools and resulted in inconsistencies in implementation, resource limitations, and communication gaps among stakeholders. Although interviewed teachers ascertained that the program brought significant changes in their attitude towards the profession, lack of readiness to practice the program was found to be an overarching problem.

An assessment made by Mekele University also showed that ELIP and professional short term trainings given to school teachers resulted in outstanding changes compared to other forms of trainings received by the teachers earlier. Paradoxically speaking, not less than 50 % of the interviewed teachers, however, still tend to show lenient behavior to demonstrate the “student-centered” approach in their classroom practices (MOE, 2007 and MOE, 2008). To bring about the required improvements in the organization and implementation of the program, the EPTED action plan suggested the need for a concerted and holistic effort between various stakeholders at national and regional levels in the following key areas:
Consulting teachers, directors, supervisors, program advisors and REBs on the present program;

• Revising and rewriting the current three manuals, and including a new module on population and family planning;

• Producing three new manuals aimed at the nature of CPD, the skills of mentoring, and the contents and purpose of portfolios;

• Creating a training program that involves the MOE, REBs, Weredas and the schools so that all teachers are covered by the program;

• Creating a monitoring and evaluation system, based on random sampling that will measure the efficacy of the new program.

In response to these problems, MOE adopted a new approach in which every school became responsible to carry out a CPD program as per the prevailing conditions in the respective schools. The new CPD is conceived as a life-long process in which a teacher is expected to be actively involved in a continuous professional development program until the end of his/her career. Taking into account the major findings and implications of the impact studies conducted by Alemaya University and Mekelle University, and the recommendations that have emerged from situational analysis by the MOE, the new CPD program stipulates eleven binding statements (The New Framework & Toolkit, 2009, p.11). These statements underline the importance of an awareness-based common understanding of all stakeholders on the essence of CPD, active involvement of teachers in planning and implementing the CPD program and relentless effort to bring change in students learning through the continual improvement of one’s teaching methodology.

Apart from enhancing one’s own professional development, CPD is linked to the career structure. Professional competencies are mandatory civic and professional duties for all Ethiopian teachers so that they can climb the career ladder. Engaging in continuous professional development to manage one’s own profession and contribute to the development of colleagues is taken as one of the competencies pointed out by the ministry.

According to The New Framework & Toolkit (2009) document, the CPD is a developmental program that moves in a cyclical path anchored at four stages namely: Plan → Do→ Evaluate→, Analyze. The framework and Toolkit (2009) document provides detailed description, implementation strategies and examples to be adopted at individual, group and institutional levels. Professional and material support networks needed, responsibilities of all CPD stakeholders specifically teachers, schools, clusters, educational bureaus and the ministry at large are major stakeholders supposed to take active part in the implementation of the program.

The new CPD which was introduced in the year 2009 empowered each school in all activities ranging from the planning stage to its evaluation stage. Theoretical underpinnings, implementation strategies, case reports, and ways by which the different bodies integrate themselves to bring change in a teacher’s belief system and work culture are new concepts in the Ethiopian school system. In spite of the detailed nature of the toolkit, it does not appear handy in
3. Method

3.1 Design of the Study

The design of the study was a mixed approach where quantitative and qualitative data complement each other. As part of the overall design the survey method was used to assess teachers’ perceptions and understandings of the process aspects of the new CPD program. This survey design was substantiated and complimented by qualitative data obtained from focus group discussions and interviews on the implementation of CPD to understand the input, processes and output of CPD practices. Relevant documents produced by the MOE, regional education bureau and the respective school are also analyzed.

3.2 Participants

The participants of this study were drawn from schools and the regional education bureau in Addis Ababa City Administration which is sub divided into sub-cities. The sub-cities are further structured into woredas, which are the smallest administrative units responsible to run schools. Four sub-cities namely: Gullele, Nefas-Silk Lafto, Yeka and Lideta were selected using a simple random method for this study. From forty three government schools in these sub-cities, twelve schools as shown in table 1 below, were randomly selected for the main study.

<table>
<thead>
<tr>
<th>Sub-city</th>
<th>No. of primary schools</th>
<th>No. of schools sampled</th>
<th>No. of teachers</th>
<th>Teachers sampled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gullele</td>
<td>11</td>
<td>3</td>
<td>1319</td>
<td>75</td>
</tr>
<tr>
<td>Nifas Silk Lafto</td>
<td>10</td>
<td>3</td>
<td>2007</td>
<td>75</td>
</tr>
<tr>
<td>Yeka</td>
<td>15</td>
<td>5</td>
<td>2117</td>
<td>75</td>
</tr>
<tr>
<td>Lideta</td>
<td>7</td>
<td>2</td>
<td></td>
<td>75</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>12</td>
<td>300</td>
<td></td>
</tr>
</tbody>
</table>
Table 2: Schools and number of teachers that have completed the teachers’ self-report questionnaire

<table>
<thead>
<tr>
<th>School</th>
<th>Number of teachers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lafto Primary</td>
<td>25</td>
<td>8.9</td>
</tr>
<tr>
<td>Fitawirari Lakargeh Primary</td>
<td>19</td>
<td>6.8</td>
</tr>
<tr>
<td>Addis Berhan Primary</td>
<td>16</td>
<td>5.7</td>
</tr>
<tr>
<td>Hibret Frie Primary</td>
<td>21</td>
<td>7.5</td>
</tr>
<tr>
<td>Kuskuam Taytu Bitul Primary</td>
<td>25</td>
<td>8.9</td>
</tr>
<tr>
<td>Addis Berhan Primary Yeka</td>
<td>21</td>
<td>7.5</td>
</tr>
<tr>
<td>Lideta Selam Primary</td>
<td>19</td>
<td>6.8</td>
</tr>
<tr>
<td>Edget Besera</td>
<td>21</td>
<td>7.5</td>
</tr>
<tr>
<td>Kokbe Tsebeha</td>
<td>25</td>
<td>8.9</td>
</tr>
<tr>
<td>Metebaber Primary</td>
<td>25</td>
<td>8.9</td>
</tr>
<tr>
<td>Addis Berhan Gulele</td>
<td>11</td>
<td>3.9</td>
</tr>
<tr>
<td>Miazia 23 Primary</td>
<td>28</td>
<td>10.0</td>
</tr>
<tr>
<td>Ethiopia Hidase</td>
<td>25</td>
<td>8.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>281</strong></td>
<td></td>
</tr>
</tbody>
</table>

The data for the study was collected mainly from teachers, vice principals in charge of the new CPD program, and CPD committee members in each school. The vice principals and CPD committee members were selected on availability basis whereas teachers were selected on the basis of a simple random sampling technique in such a way that both cycles, male and female teachers as well as teachers positioned at different qualification and career structure levels were fairly represented.

3.3 Instruments

Three distinct steps were taken to develop the teacher rating scales. First, pertinent literature was reviewed on continuous teacher professional development. That was followed by a review of policy documents issued by the MOE on teacher professional development in general and continuous professional development in particular. Key thematic areas relevant to our research were identified from the literature review. These include the general perception of teachers about the impact of CPD, the mentoring/coaching process, action research and professional development, teachers’ self-reflection on their performance, and essential conditions for successful implementation of CPD. All items under these thematic areas were framed on a five point Likert-type scale. Moreover, items that measure the contribution of CPD to the professional development of teachers were framed in a “Yes” or “No” response format. A pool of about seventy to eighty items was constructed. These items were clustered under the thematic areas. Furthermore, content analysis was made and items that did not fit into the themes were discarded or modified and re-constructed. After a series of meetings the content validity of the items was checked and further evaluated by experts in the regional education bureau working in the teacher professional development section. After a preliminary screening of the items, experts evaluated the relevance of the items to the research purpose along a five point scale ranging
from ‘Most appropriate’ to ‘Least appropriate’. Inter-rater reliability coefficients were computed for the whole scale and the sub-scales based on the ratings of the experts.

Backward and forward translation from English to the local Amharic language was made by the research team for those items that passed the screening procedures. Through discussion and consensus by the research team problems of ambiguity, wording and other problems that could lower the quality of the items were resolved.

3.4 Procedures

A preliminary survey was undertaken in two selected primary schools in the study area. The purpose of the preliminary survey was twofold. One was to determine the reliability of the measuring instrument and to verify whether or not the instrument met the purpose for which it was developed. The second purpose was to see the general pattern of data collection and to verify the suitability of the analysis techniques shown in the research proposal. The preliminary data and the analyses highlighted important information that would help to refine the instrument and the relevance of variables included in the study. The major findings from the preliminary pilot study are presented in Table 3.

**Table 3: Reliability coefficients for the sub-scales**

<table>
<thead>
<tr>
<th>Scales</th>
<th>Number of items</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 General perception</td>
<td>10</td>
<td>0.95</td>
</tr>
<tr>
<td>2 Mentoring</td>
<td>4</td>
<td>0.40</td>
</tr>
<tr>
<td>3 Action research</td>
<td>5</td>
<td>0.18</td>
</tr>
<tr>
<td>4 Self reflection</td>
<td>4</td>
<td>0.81</td>
</tr>
</tbody>
</table>

In order to find out the internal consistency of the measuring instrument each item was correlated with the total score. Except for two items namely “The monitoring process is according to the needs of the beginner teachers than the school management” (r=0.06) and “I do action research as a means for promotion in the career structure” (r=.07), the rest of the items were moderately and highly correlated with the total score on the fifteen items (coefficients range from 0.224-0.779). However, in some cases it was found out that there were some ambiguous items that somehow confounded the results, which required some kind of amendment to improve the quality of these items. Furthermore, Cronbach alpha was also computed for the whole instrument and the subscales. The instrument was found to be highly reliable (r=0.935). Table three shows the reliability coefficients for the subscales. Reliability coefficient of the subscale “action research” was found to be low compared to the rest of the subscales. One possible explanation that lowered the reliability coefficient of this subscale could be the number of items which were few in number.

To resolve this problem more items with better psychometric qualities that could measure the practice and importance of action research in teacher continuous professional development were included. After making important revisions, the final version of the instrument was made ready for the actual data collection and included open ended questions.
Focus group discussions were conducted with CPD committee members in three selected schools involving five to ten teachers in each school. The FGDs focused on the involvement of teachers in planning, implementing, and assessing the new CPD program at the school level, the support system available for teachers to run the program, and results obtained from the new CPD program in terms of teacher professional growth in particular and in the mitigation of school-based problems. All FGD discussions were facilitated by members of the research team.

Relevant documents including policies and strategic implementation documents as well as reports were also reviewed to supplement the data collected from primary sources.

3.5 Method of Data Analysis

The data collected through a self-report questionnaire were analyzed using statistical techniques namely percentages, t-tests and analysis of variance in order to draw relationships between the demographic variables and CPD process variables. Data from interviews, focus group discussions and documents were sequentially collected and analyzed thematically.

4. Results

4.1.1 Analysis of Quantitative Data

A self-report questionnaire piloted in two primary schools was distributed to 300 teachers teaching in the first and second cycles of twelve primary schools located in the Addis Ababa City Administration. Two hundred eighty-one questionnaires were returned which makes the return rate 94%. The purpose of the questionnaire was to collect quantitative data regarding teachers’ perception on the process aspects of the CPD programs taking place in their respective schools. The questionnaire had different components meant to assess teachers’ perceptions and understanding of the overall benefits of CPD, the Mentor-Mentee relationship, Teachers self-reflection of the CPD program, and the role of Action research in promoting teachers’ career and professional development. Each component of the instrument was represented by an adequate number of items to capture the meaning of CPD in the Ethiopian context in particular.

An attempt was made to see the relationship between different demographic variables such as gender, respondents qualification levels, their current career position, and the levels at which they are teaching at present and the dependent variables (i.e., Positive Conditions for CPD, CPD Mentoring, CPD Teacher self-reflections, Essential conditions for the effectiveness of CPD).

Percentages and inferential statistics such as independent “t” tests, as well as “F” ratios were computed to see if there are statistically significant mean differences between the different demographic variables. Table 4 and Table 5 show distributions of respondents by gender and educational level.
Table 4: Distribution of respondents by gender (N=281)

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>154</td>
<td>54.8</td>
</tr>
<tr>
<td>Female</td>
<td>124</td>
<td>44.1</td>
</tr>
<tr>
<td>Total</td>
<td>278</td>
<td>98.9</td>
</tr>
<tr>
<td>Missing</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>Total</td>
<td>281</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As shown in table one, 154 (54.8%) of the respondents were male teachers. The remaining one hundred twenty four (44%) were female teachers.

Table 5: Distribution of respondents by educational level (N=281)

<table>
<thead>
<tr>
<th>Level</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>6</td>
<td>2.1</td>
</tr>
<tr>
<td>Diploma</td>
<td>136</td>
<td>48.4</td>
</tr>
<tr>
<td>Degree</td>
<td>61</td>
<td>21.7</td>
</tr>
<tr>
<td>Others</td>
<td>51</td>
<td>18.1</td>
</tr>
<tr>
<td>Total</td>
<td>254</td>
<td>90.4</td>
</tr>
<tr>
<td>Missing</td>
<td>27</td>
<td>9.6</td>
</tr>
<tr>
<td>Total</td>
<td>281</td>
<td>100.0</td>
</tr>
</tbody>
</table>

In relation to educational level, the majority of the respondents (48.4%) were diploma holders whereas 21.7% had bachelor degrees. Only 2.1% of the respondents were at a certificate level. Upgrading the qualification status of primary school teachers teaching in the first and second cycles to diploma and degree levels has been set as an important goal of the school improvement program (SIP) by the MOE. Prior to the introduction of SIP, teacher training institutes used to train primary school teachers at the certificate level focusing heavily on the methodology aspect. These same teachers were at times expected to teach at junior levels (grades 5-8) which of course was a challenge for many teachers in terms of mastery of subject knowledge.

Tables 6 and 7 show the distribution of respondents by their career position and the level at which they are currently teaching. The new career structure for primary school teachers is hierarchically structured ranging from the lower position i.e.; “beginner teacher” to the highest “lead teacher”. The minimum number of years a particular teacher should spend at each level and the requirements to be fulfilled for each level varies as teachers move within the hierarchy. One hundred fifty one (53.7%) of the respondents were teaching at the second cycle which of course substantiates the high number of diploma holders as shown in table 2 above.
The majority of the respondents in this sample were in the “Junior” and “Teacher” levels (33.8% and 27%) respectively. Although the criteria seem stringent as one moves up, a substantial number of respondents (19.9%) have reached the position of “lead teacher.”

One hundred fifty-one (53.7%) of the respondents were teaching at the second cycle which of course substantiates the high number of diploma holders as shown in Table 5.

Independent “t” tests were computed to see if there are statistically significant differences between male and female respondents along the four dependent variables i.e., positive influences of CPD on the overall teaching learning process, CPD and the mentoring process, teachers’ self-reflection on their day-to-day teaching activities, and the essential conditions for sustainable use of CPD for professional development. Except for the dependent variable “Teachers reflection”, male and female respondents did not differ in their perception on the rest of the process aspects of CPD.

Table 6: Distribution of respondents by their position in the career structure (N=281)

<table>
<thead>
<tr>
<th>Career ladder</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner teacher</td>
<td>20</td>
<td>7.1</td>
</tr>
<tr>
<td>Junior teacher</td>
<td>95</td>
<td>33.8</td>
</tr>
<tr>
<td>Teacher</td>
<td>76</td>
<td>27.0</td>
</tr>
<tr>
<td>Higher teacher</td>
<td>26</td>
<td>9.3</td>
</tr>
<tr>
<td>Associate teacher</td>
<td>7</td>
<td>2.5</td>
</tr>
<tr>
<td>Leader teacher</td>
<td>56</td>
<td>19.9</td>
</tr>
<tr>
<td>Total</td>
<td>280</td>
<td>99.6</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Total</td>
<td>281</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 7: Distribution of respondents by the cycles they teach in (N=281)

<table>
<thead>
<tr>
<th>Cycle</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>First cycle</td>
<td>121</td>
<td>43.1</td>
</tr>
<tr>
<td>Second cycle</td>
<td>151</td>
<td>53.7</td>
</tr>
<tr>
<td>Total</td>
<td>272</td>
<td>96.8</td>
</tr>
<tr>
<td>Missing</td>
<td>9</td>
<td>3.2</td>
</tr>
<tr>
<td>Total</td>
<td>281</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 8: Mean score comparison of male and female respondents on the CPD variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>S</th>
<th>t-value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Conditions for CPD</td>
<td>Male</td>
<td>152</td>
<td>27.11</td>
<td>10.23</td>
<td>-0.60</td>
<td>0.55</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>123</td>
<td>27.89</td>
<td>11.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPD Mentoring</td>
<td>Male</td>
<td>150</td>
<td>22.07</td>
<td>3.76</td>
<td>1.02</td>
<td>0.31</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>123</td>
<td>21.61</td>
<td>3.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPD Teacher self-reflections</td>
<td>Male</td>
<td>153</td>
<td>9.44</td>
<td>3.65</td>
<td>3.85</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>121</td>
<td>7.95</td>
<td>2.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essential conditions for the</td>
<td>Male</td>
<td>151</td>
<td>26.50</td>
<td>8.74</td>
<td>-0.17</td>
<td>0.86</td>
</tr>
<tr>
<td>effectiveness of CPD</td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
With regard to the variable “Teachers self-reflection”, male respondents tend to monitor and evaluate their performance more than female respondents \((t=3.85, p<0.00)\) using various strategies such as peer discussion, and assembling of good practices in the form of portfolios. Descriptive statistics and “t” values for mean comparisons of male and female respondents in relation to the four dependent variables are shown in Table eight.

Respondents were also compared in relation to their qualification levels. A one way ANOVA was run to find out statistically significant differences between certificate, diploma, and degree holders. The “F” statistics revealed significant mean differences between the qualification layers in relation to the variables “Positive influences of CPD” and “Essential conditions for sustainable use of CPD” \((F=4.77, p<0.00\) and \(F=6.48, p<0.00\)). Statistically speaking significant differences were not found between the qualification levels with regard to the mentoring process and teachers’ self-reflection of their day-to-day teaching activities.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Source of variations</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Conditions for CPD</td>
<td>Between Groups</td>
<td>1487.78</td>
<td>3</td>
<td>495.93</td>
<td>4.77</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>25661.79</td>
<td>247</td>
<td>103.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>27149.57</td>
<td>250</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPD Mentoring</td>
<td>Between Groups</td>
<td>23.71</td>
<td>3</td>
<td>7.90</td>
<td>0.59</td>
<td>0.62</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>3293.08</td>
<td>245</td>
<td>13.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3316.80</td>
<td>248</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPD Teacher self-reflections</td>
<td>Between Groups</td>
<td>43.73</td>
<td>3</td>
<td>14.58</td>
<td>1.39</td>
<td>0.25</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>2593.09</td>
<td>247</td>
<td>10.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2636.82</td>
<td>250</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essential conditions for the effectiveness of CPD</td>
<td>Between Groups</td>
<td>1472.50</td>
<td>3</td>
<td>490.83</td>
<td>6.48</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Post-hoc analysis was also made to compare the mean values of the layers. Respondents teaching in the first cycle and second cycle of primary education were compared by using their responses to the four CPD dependent variables. Except for the variable “Teacher self-reflections” the teachers did not substantially differ in their perceptions of the remaining three variables. Descriptive statistics and “t” values for the mean comparisons of responses for the two groups are shown in Table 10.
Table 10: “t” test for mean differences between teachers in the first and second cycles to CPD variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>cycle</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Conditions for CPD</td>
<td>First</td>
<td>119</td>
<td>27.49</td>
<td>11.98</td>
<td>0.19</td>
<td>0.85</td>
</tr>
<tr>
<td></td>
<td>Second</td>
<td>150</td>
<td>27.24</td>
<td>9.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPD Mentoring</td>
<td>First</td>
<td>118</td>
<td>21.48</td>
<td>3.77</td>
<td>-1.69</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>Second</td>
<td>150</td>
<td>22.25</td>
<td>3.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPD Teacher self-reflections</td>
<td>First</td>
<td>118</td>
<td>8.07</td>
<td>3.08</td>
<td>-3.24</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Second</td>
<td>150</td>
<td>9.35</td>
<td>3.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essential conditions for the</td>
<td>First</td>
<td>116</td>
<td>26.16</td>
<td>9.48</td>
<td>-0.55</td>
<td>0.58</td>
</tr>
<tr>
<td>effectiveness of CPD</td>
<td>Second</td>
<td>147</td>
<td>26.78</td>
<td>8.73</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean score for teachers teaching at the second cycle (M = 9.35) was found to be statistically higher than the mean score of teachers teaching in the first cycle (t = -3.24, p < 0.00) indicating that teachers in the second cycle tend to use peer discussions, self-assessment of one’s own daily routines, and use of portfolios to assemble best practices more frequently that their counterparts teaching in the first cycle.

Further analyses were made to find out if significant differences existed in teacher work experience as measured by the number of years and duration they stayed in the profession. Comparisons were also made between teachers found at different echelons of the career structure. In both cases statistically no significant differences were revealed between the different demographic groups in relation to the four CPD variables.

Action research is considered an important component of teacher professional development. Teachers in the Ethiopian context are expected and encouraged to conduct action research to solve problems they encounter in their day to day activities. Apart from developing their career, action research is supposed to be regarded as an important milestone to move upward through the career ladder despite the problems in conducting it at the school level. Five “Yes” “No” items were developed and teachers were asked to what extent action research contributed to their professional development. Percentage distributions for the “Yes” and “No” items are shown in Table 11.

Table 11: Percentage distributions for the “Yes” and “No” items

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do action research to improve my profession</td>
<td>188</td>
<td>66.9</td>
<td>74</td>
<td>26.3</td>
</tr>
<tr>
<td>Action research is one of the criterion for professional development</td>
<td>188</td>
<td>66.9</td>
<td>77</td>
<td>27.4</td>
</tr>
<tr>
<td>I have no time to do action research</td>
<td>101</td>
<td>35.9</td>
<td>164</td>
<td>58.4</td>
</tr>
<tr>
<td>Teachers do action research with imposition</td>
<td>65</td>
<td>23.1</td>
<td>199</td>
<td>70.8</td>
</tr>
<tr>
<td>I do not get sufficient professional support for doing action research</td>
<td>156</td>
<td>55.5</td>
<td>107</td>
<td>38.1</td>
</tr>
<tr>
<td>I do not get sufficient resources for doing action research</td>
<td>140</td>
<td>49.8</td>
<td>123</td>
<td>43.8</td>
</tr>
<tr>
<td>I have knowledge for doing action research</td>
<td>191</td>
<td>68.0</td>
<td>73</td>
<td>26.0</td>
</tr>
</tbody>
</table>
As shown in Table 11, most of the respondents perceived action research as a means to develop their career. For example, for the items that read “I do action research to improve my profession” and “Action research is one of the criteria for professional development” 66.9% said “Yes” and about 26% said “No” in both cases. Despite shortage of time to conduct action research, teachers maintain that action research can still be conducted. It appears from the data in Table eleven that the school management is also supportive in terms of availing resources and professional backing.

The last part of the quantitative analysis was devoted to teachers’ views on the contributions made by CPD programs to their continuous professional development. Respondents were asked to indicate the extent to which school based programs and activities contributed to their profession along a five-point scale ranging from “Very low” to “Very high”. In order to ease the analysis and find the highest contributing factors for school-based continuous professional development, percentages in the “High” and “Very high” categories were merged together and composite percentages computed. Percentage distributions for each contributing variable are shown in descending order in Table 12.

<table>
<thead>
<tr>
<th>Table 12: Variables that contributed most to the CPD process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Items</strong></td>
</tr>
<tr>
<td><strong>N</strong></td>
</tr>
<tr>
<td>Mentoring</td>
</tr>
<tr>
<td>Action research</td>
</tr>
<tr>
<td>School in-house workshop</td>
</tr>
<tr>
<td>Advice from colleagues</td>
</tr>
<tr>
<td>Directives from the school leadership</td>
</tr>
<tr>
<td>Visits to other schools</td>
</tr>
<tr>
<td>Learning from students</td>
</tr>
<tr>
<td>Study groups</td>
</tr>
<tr>
<td>Observation of colleagues work</td>
</tr>
<tr>
<td>Learning from individual readings</td>
</tr>
</tbody>
</table>

As shown in Table 12, the “Mentoring process” stood as the number one contributing factor for teacher professional development (29.1%) followed by “Action research” (28.8%) and “School in-house workshop” (27.8%). “Advice from colleagues” (27%) and “Directives from the school leadership” (26.3%) were also preferred areas of activities for teacher professional development at the school level. These results have important implications for designing plans and programs of teacher professional development at school, woreda and regional educational bureau levels.

4.1.2 Analysis of Qualitative Data

Qualitative data from interviews and focus-group discussions were analyzed primarily to identify participants’ perceptions and understandings of school-based teacher professional
development and its role in enhancing quality education. Categories were derived from information that emerged from the qualitative data. That was followed by coding activities. Issues of importance that emerged from the open ended items included in the teacher self-report questionnaires and interviews conducted with vice principals and education officers were triangulated for the purpose of comparison and synthesis of the basic themes.

The new approach to CPD: Experience of selected schools

The research team reviewed the experiences of three primary schools namely Birhan Guzo, Minilik II primary school and Tesfa Kokeb in selected sub-cities in Addis Ababa. Since the new approach to CPD was initiated only recently, it was not possible to look at the complete process of its implementation and the outcome. Hence, the research team focused on learning about the inception stage of the new approach.

The new approach to CPD was introduced in all schools under the Addis Ababa City Administration in February 2011. The discussions the research team conducted with the leadership of the selected three schools revealed that the major activities involved in the inception of the new CPD include the following:

- Deputy Principals in charge of school based TPD in the three primary schools indicated that the Ministry of Education developed and disseminated a national framework which serves as a guide for primary and secondary schools in running school based CPD.
- Sub-cities education offices organized a five day training for school leadership (Principals and deputy principals) on the new approach.
- The trained principals, in-turn, organized a two day training for all teachers in their respective schools.
- Each teacher is provided with the guide material prepared on the new approach to CPD implementation.

Conditions for the implementation of the CPD in the new approach

- Teachers are critically important in the effort to improve the quality of teaching and learning. Therefore, all teachers engage in implementing the new school based CPD
- Schools identify areas/problems to be a target of intervention for a school year. Different stakeholder (teachers, students, principals, parents) get involved in the process of identifying areas of intervention to bring about change and improvement in the teaching and learning activities.
- National policies and strategies are considered in selecting priority areas for interventions at schools.
- Schools review the implementation of all intervention plans at the school, department, and individual teacher level. At the end of the school year priority issues/problems for the next year are identified.
Inception of the CPD in Schools

The program was stated with the objectives of promoting active learning, problem solving, and student centered teaching methods (MOE, 2009). It was developed for the newly deployed teachers and other teachers. According to MOE (2009), in implementing the CPD, newly deployed teachers are expected to work through a two year induction program, produced at the national level and supported by mentors who are to be selected from the experienced members of the staff in the school. All other teachers were expected to carry out the CPD program. This program consists of three course books which teachers will work through in small groups and meet at least once every two weeks within a school or cluster of schools. Each course consisted of three units covering aspects of teaching and learning and school ethos. The groups were designed to be led by facilitators, usually selected from experienced members of the school staff.

In Berhan Guzo primary school the CPD was started in 2011. In order to implement the objectives of the CPD the school identified ten issues/problems through teacher, parent and student discussions. Based on the guideline issued by the Ministry of Education, the school selected three priority issues/problems for intervention in the school year. The school prepared a plan for intervention at three levels.

First, a school-level plan was developed (module). The school leadership organized different activities (experience sharing visits, organizing training programs, etc.) for about sixty hours in the school year. For instance, this school identified three problem areas, namely: continuous Assessment (13 hours), improving English language skills among teachers (26 hours) and improving students’ performance in science subjects (21 hours). Subsequently they developed an action plan for the year 2011 (Semester II).

Second, each department selects any two of the three school-level areas and adds one new area/topic of its own. Hence, each Department prepares an intervention plan (module) for the department in the selected three areas for sixty hours in a school year. The department develops its own strategy involving specific intervention activities in each of the three selected areas.

Third, each teacher in the school is required to select two of the three issues/problems identified by his/her respective department and add one new issue/problem of their own. Following this each teacher prepares an intervention plan (module) in which the teacher is actively engaged for sixty hours in a school year.

The deputy principals of the three schools indicated the following as challenges observed in the inception period of school based CPD:

- Teachers appear unhappy with the arrangement where they are required to work on CPD after 3:30 pm (the time identified for such activities)
- In many cases, teachers show low interest in participating in meetings organized for discussions on CPD
- The training given on CPD is insufficient to enable schools and teachers to actively engage in the program
- Resources (financial, material) of schools are limited; hence, the support given to
At present, there are no clear incentives for those who work hard on CPD and those who do not.

There is no follow up or support from higher level offices for the program.

**Teacher views on the new CPD**

Teacher responses to the open-ended questions in the teacher questionnaire revealed a series of problems that affect the implementation of the CPD program at the school level. One of the major problems reported by teachers deals with the issue of knowledge and understanding on the essence of the CPD program. This point was explained in reference to teachers, CPD coordinators, school principals and trainers, each of which are involved in the program in different ways and at various levels. The data obtained from teachers revealed the following as core and widely perceived problems with respect to teacher knowledge and understanding of the essence of the CPD program.

The trainers lack adequate knowledge and experience on CPD; as a result, teachers and principals who participated in the initial training could not help others develop a clear understanding of the program; hence, teachers viewed the contribution of this group as trainers at their own schools as limited. Another dimension of the issue relates to the knowledge of the coordinators of the program at the school level. A review of teacher views indicated that officers involved in the coordination of the program do not have a clear understanding about CPD and its implementation strategies. From teacher views, it appears this situation has resulted in low level understanding on the part of the teachers who are the major stakeholders of the program.

The gap in the knowledge and understanding of teachers and coordinators on CPD, as noted by teachers, is attributed to problems associated with the initial training. Along this line, teachers forwarded the following as examples of deficiencies in the training:

- The reading material (CPD toolkit) is lengthy and unattractive; hence, not readable. Duration of the training was very short; hence, the training given was inadequate.
- Trainers were not competent; they lack experience.
- Lack of budget to organize school-level training.
- There has not been further professional support at school.
- Lack of continuity in training on CPD has limited opportunity to close the gap in knowledge and understanding.
- There were no adequate and clear discussions with teachers at the inception of CPD.

The views of teachers on the deficiencies of the initial training on CPD appear consistent with the reported level of knowledge and understanding of teachers and coordinators of the program. Based on this evidence, one can reasonably assume that the quality of the initial training program had notable drawbacks. Hence, it would be difficult to assume that it has met the objective of enabling teachers to understand and implement the CPD program at the school
level.

Teachers have reflected further implications on the implementation of CPD. A lack of interest, initiative and commitment, supportive/positive attitudes to the CPD program and a low level of collaboration were all observed among teachers in connection to implementation of the program. A lack of timely and regular follow-up on the part of leadership was also reported by teachers as visible challenges. Absence of certification and a lack of a clear scheme to motivate teachers to engage in CPD activities on a continuous basis, as noted by teachers, have contributed to the fall in teacher interest and commitment.

**FGD data analysis**

Focus group discussions were conducted in three primary schools with the intent to grasp teacher views, perceptions and understandings of the input, process and output aspects of CPD in their respective schools. Data obtained from these discussions were transcribed and summarized in the following section.

**FGD One**

**School name: Lideta Selam Primary School**

A focus group discussion was carried out with Lideta Selam Primary School on January 2, 2012. One male and three female teachers participated in the FGD. The discussion was carried out on issues related to the implementation of the CPD. The discussion was organized under the themes; provisions to support the CPD, participants view on the appropriateness of the school-based CPD decisions, benefits of the new CPD, motives for engaging in the CPD, considering the CPD for professional development, effectiveness, sustainability and major barriers encountered in program implementation.

**Provisions to support the CPD:** From the FDG it was made clear that one of the provisions to support the CPD program at the school level is training. The participants said that training was given for two days for some teachers. Teachers expressed that the training was not enough. The school supports teachers with pens and papers. CPD does not require many resources. In addition, the school supports teachers by setting priority areas with two teacher priority areas and one school priority area to work on the CPD. The school supervisor, the head teacher and the deputy teacher closely work with the teachers in setting and implementing the CPD activities.

Currently there is support for schools by providing training. But it should be clear that there are no training manuals and guidelines for CPD. These are key issues for the success of the CPD. In the absence of working guidelines and manuals, most teachers learn from each other. They copy the module prepared by another teacher. One of the participants said that out of 38 teachers 16 of them are working on the same problem.

They are best supported by realizing the objectives of the CPD, how it works, reasons for being engaged in CPD, supporting one another and being shown samples of the objectives
which were set before. Collaboration is one of the best ways of supporting a teacher in setting objectives for the CPD.

The most difficult aspect of the CPD is that it is not possible to implement the CPD through punishment. There are senior teachers who resist it. We miss the experiences of these teachers if they do not get involved in CPD. They ask what changes will it bring in my life after all this? The school provides them time for the implementation, provides them with materials and supports them in writing letters to the parents and woreda to collaborate with the school and follow up on what has been done by each teacher. Still there are many teachers who still fail at this stage.

**Participants’ view on the appropriateness of school based CPD decisions:** Most of the decisions about CPD (including problem identification, planning and implementation, availing resources) are made at the school level. The participants supported the approach of making such decisions at the school level. They said that most of the decisions about the activities of the CPD are done by teachers. The decisions in choosing priority problems and their implementation are those of the individual teacher. The appropriateness of such decisions is not questionable. But the effectiveness of its implementation is a huge task. Last year only one teacher out of 38 teachers successfully completed the CPD. Others ask what was the benefit of the old CPD and why are we working on the new CPD now? However, through effective advocacy work, this year all of the teachers were convinced about the importance of being involved in the CPD and as a result all teachers have completed the preparation of the modules up to now.

**What do teachers like most about the new CPD approach?** The participants of the FGD said that what they liked most was to observe the changes because they had gone through it. It made them interested in the CPD when they identify their own problems, examine them, make efforts to change them, and come up with observable changes. For example, student tardiness was one of the CPD problems to be studied by a teacher. He identified those students who are frequently late. He studied why the students are late. He tried to solve the problem by continuously discussing it with them and their parents. There is a big change in regard to this in the school now.

However, there is confusion on whether or not student tardiness is a CPD problem to be studied. There is no agreement whether student tardiness is a CPD problem or not among the teachers. One of the trainers at the woreda level said that it is not and another said that it is a CPD problem. There is thus confusion in this regard. It should be known that tardiness is a persistent problem in schools.

**Motivating factors to engage in CPD:** One of the participants said that what motivated them to engage in CPD was the outcome that they observed because of engagement in CPD.

The other motivating factors are it is mandatory; without it there is no teaching license, no career development, no competition for career development and as a result no salary increment.
It is a must to engage in the CPD for all teachers. For example, the beginning teacher, who never goes through induction, does not get the first career ladder status of being a junior teacher. So it is a must to be engaged in CPD.

However, it must be clear that this does not mean that all teachers are equally and actively participating in CPD. There are many teachers who do not accept the idea of CPD. They do not believe in it as an agent of change. Such teachers prepare the modules but do not implement them.

The CPD should be integrated within the career structure as one of the criteria but not as mandatory. They said that the CPD should be part of the teacher professional development as it has a number of advantages such as:

- Accountability
- Avoids laziness, carelessness and reluctance - “cheliitegnentinina nizlahalineetiin yasweegdaal;”
- It improves the quality of teachers particularly that of beginners.

**Effectiveness of the CP in achieving objectives:** The work of each teacher is recorded and kept in a file. Each of the plans of the teacher is examined and adjustment is made if there is a problem in the preparation of the plans. Finally the plan is approved by the CPD committee. The completeness of the CPD is evaluated by the committee and then finally the committee recommends the issuance of the completion certificate by the school.

**Suitability of the CPD:** The participants said that the sustainability of the CPD depends on the commitment and interest of each teacher in solving the CPD problems he or she identified. It demands time including on weekends and early arrival at school. So commitment of each teacher is a key to its sustainability. Teachers should be convinced to be committed to their profession. As it is mandatory it will be sustainable. There are many teachers who are convinced about its importance and usefulness. Step by step it will become the day to day routine of teachers and thus sustainable.

**Enhancing quality of student’s learning through the CPD:** The participants were uncertain if quality has been enhanced through the CPD or not as this is not yet seen. Whether it is useful in enhancing student quality of learning will be judged after its full implementation. At this point all teachers have developed the modules and the implementation remains. The question of quality achievement will be answered after the implementation and observation of student achievement.

**Major challenges to CPD implementation:** The participants identified major challenges to the implementation of the CPD as:

- Shortage of time
○ Too many problems
○ The fade-upping nature of the CPD
○ Its use as a tool of intimidating teachers by connecting it with career development
○ Being additional work that is not paid

They suggested that the challenges can be reduced by engaging a teacher on a single problem at a time rather than multiple problems. Another way of reducing the challenges of the CPD is by continually convincing teachers about its advantages.

FGD Two
School name: Kokebe Tsebah Primary school

A focus group discussion was conducted at Kokebe Tsebah Primary School with participants including nine teachers and the deputy principal in charge of continuous teacher professional development in the school. The discussion focused on the differences between the old and the new CPD programs.

Concerning the question on the differences between the old and the new CPD programs at the school, the participants reflected that the old CPD focused on reading material on three different topics. The materials were prepared centrally and teachers were required to read and discuss them in groups involving 7-8 persons. They were found to be ineffective. The new CPD, on the other hand, follows a different approach. It aims at up-dating and upgrading teachers in terms of knowledge and adjustment in career structure based on school based activities. Here, schools are expected to identify three priority problems out of which each teacher selects and implements one based on his/her interest and area of study. This work is guided by a manual/toolkit prepared by the Ministry of Education. In other words, a plan for teacher professional development is developed and implemented by each school with the active participation of teachers both in groups at the department level and at the individual teacher level.

Another point discussed was related to the follow-up mechanism. The question posed here was “How are the school teacher professional development activities implemented at the individual teacher level?” The participants identified two strategies the school used to follow-up on CPD activities at each teacher level.

First, each department organizes discussion sessions on teacher professional activities carried out by teachers in the Department. Performance of each teacher is discussed with emphasis on the sharing of experiences and giving feedback on each of the teacher activities. This exercise, as reported by the FGD members, helps individual teachers to clarify gaps and ambiguities. In cases where the problems were raised by individual teachers, the department organizes experience sharing visits to other schools. Each department keeps records of the minutes of the discussions by teachers on their professional development.

Second, each teacher is required to develop a portfolio of his/her own. Contents of teacher portfolios includes their accomplishments in the area of their professional development. Particularly, each teacher keeps a record of the implementation of individual plans in the form of
notes, sample work, etc; in the portfolio.

Teacher views on the current practice of requiring teachers to engage in teacher professional activities for sixty hours was another issue discussed. Teachers reflected favorable views on the practice. The participants noted that it is not appropriate to leave the time issue open to individual teachers. Requiring teachers to work on CPD activities for certain hours every week gives direction and a regulatory mechanism to ensure their engagement in the task.

Finally, a discussion was conducted on the major problems faced in the course of implementation of the CPD program at the school. Two major issues or problems emerged out of the discussion on this point. First, the participants noted that incentive mechanisms need to be established in order to sustain interest and commitment of teachers in the CPD program. At the moment, there is no clear measure or direction on this matter. At present, there is no mechanism to recognize teachers who make efforts in implementing their professional development plans. Second, the promises made by the Ministry of Education in relation to certifying teachers through the CPD program have never been implemented. This situation has lead to confusion and lack of direction on the part of teachers. This situation, as indicated by the participants, would have a negative impact on the continuity and sustainability of CPD activities by teachers.

Finally, the participants outlined the need for organizing further short-term training programs on CPD. So far, principals, supervisors and a limited number of teachers have participated in the CPD training program.

**FGD Three**

**School name: Kuskuwam Primary School**

A focus group discussion was conducted at Kuskuwam Primary School with the intent of capturing data pertinent to the input, process and outcome situation of the CPD program. Discussants were six CPD committee members and the vice principal in charge of executing the overall activities related to CPD in the school. Two members of the research team led the discussion using interview protocol developed for this purpose. In introductory remarks the vice principal in charge of the CPD program in the school briefly explained the purpose of this discussion and further highlighted the overall undertakings for the professional development practice in their school. She explained that CPD is a capacity building process to acquire new knowledge, a strategy in the improvisation of teaching skills and a means to bring change in the belief system of teachers. She further noted that it is a self-enhancement strategy triggered intrinsically to bring enduring change in the career lives of teachers and assure the quality of education at the national level. At school the process is structured at the individual, department and school levels in such a way that every teacher takes part in the implementation of identified priority intervention areas in the school. The sixty hour self-enhancement strategy has different packages such as developing modules in at least one of the priority areas, improvisation of one’s own teaching methodology, classroom observations, and cluster school visits.

Discussants were asked to explain the unique features of the new CPD program and what opportunities exist to encourage teachers to participate actively in the program. The
distinguishing feature of the new CPD program according to one discussant is the bottom-up approach. Teachers plan, teachers implement, teachers evaluate. In the new approach teachers are the sole owners of the program. Another discussant characterized the old CPD as:

_The old CPD was monotonous, ambiguous, full of inconsistencies and something that does not address school-based problems and detached from context._

The discussant further outlined that, unlike the old CPD the new CPD helped teachers to believe the program to be an integral component of their own career development. This is the actual meaning of teacher professional development. The major components of the CPD cycle indicated in the toolkit take on meaning at the school level when teachers own the program. The fact that the program is coordinated by a vice director and trainings are given at an individual teacher level can be considered as an opportunity. The individual teacher is supported by the vice principal, CPD committee, and at the department level. The implementation of the new CPD started a year ago and although it is premature to pronounce its effectiveness, the program seems to be strongly grounded as perceived by the discussants at this stage.

The other question posed to the discussants was the relationship between CPD and teacher career development. Should CPD participation be counted as a precondition for teacher transition in the career structure? How do teachers perceive CPD and career development? The discussants indicated that there must be a mechanism by which the committed teacher can be differentiated from the uncommitted one. Those who work hard and are devoted to their profession must somehow be rewarded. Although there are other notable requirements to promote teachers to the next higher level, it is logical and convincing to recognize CPD performance as a criterion for them to step up the career ladder.

The other practical question raised by the research team was the procedures in place to monitor the overall process of CPD at the school level. The vice principal noted that they have a number of mechanisms by which they can monitor and follow up the implementation of the process. If for example, the individual teacher has developed a module on arranging tutorial classes for low performing students, or if he has planned to intervene the problem of late comers, they have developed a reporting system. Periodically the teacher is expected to report to the office interventions he has made to mitigate the three problems identified at the school level or at the individual teacher level. A checklist is also in place to gauge the number of tutorial classes arranged and the number of students who benefited from the tutorial classes. Portfolios meant for students to show progress reports, follow up and diagnostic ways to solve the problems at an early stage are also strategies used by teachers. The next to the last question raised by the facilitators of the discussion was on the actual outcome observed from the implementation of the new CPD program. Improvement in teacher use of the student centered approach, gradual improvement in student learning performance, and the aesthetically appealing physical environment of the school compound are signs which can be attributed to active involvement by the teachers in the professional development program.
The last question forwarded to the discussants was on the problems encountered in the implementation of the new CPD. The following are some of the problems which persist despite the strenuous efforts made by teachers:

- Inadequate parental involvement in their children’s learning
- Although it was possible to bring down the number, still a good number of students are coming to classrooms without doing their assignments
- Budget, resource constraints to conduct action research and to make cluster school visits
- Last but not least lack of time to complete the sixty hour CPD program in the specified year.

The one and a half hour lively focus discussion time was adjourned by congratulating the participants and the vice director for devoting their spare time for this research. Prospectively the research team promised to work very closely with the school in supporting the implementation of the new CPD program in terms of training, resource sharing, and other capacity building programs.

**Document analysis**

As indicated above every teacher, department, the principal and the vice principal in charge of the CPD program are expected to work out a module action plan. The format is the same for all except that each part is customized to serve a particular interest of the individual teacher or group of teachers working in one department. Priority areas of intervention, participants, responsible bodies to carry out that particular area of interest, time needed to complete the task and anticipated outcomes are components of the module. Although priority areas of interventions do vary from one school to the other, it is appropriate to show here how a given school plans and carries out the different activities in order to achieve the desired and anticipated results of the CPD program. One sample school was selected from the study sites for this purpose and the different documents being used to implement the CPD plan module are qualitatively analyzed. Before the three top priority areas were identified, teachers, students and parents had a meeting to consider problem areas in the school. Teachers, students, and parents for example at Kuskuam Taitu Bitul Primary School discussed a wide array of problems and identified twenty problems that are related to the CPD program. Further analysis of the problems enabled identification of three top-problems that need immediate attention and resource mobilization in this particular school context. It is around these three problems that each subject teacher, department, and principal worked out their respective module plans. A sample of the module plan of the school and the strategies adopted by the school and departments are shown in the table below.
Table 13: Department of Mathematics Annual CPD Module Plan at Kuskuam Taitu Bitul Primary School

<table>
<thead>
<tr>
<th>No</th>
<th>Priority areas</th>
<th>Participants</th>
<th>Responsible body</th>
<th>Time frame</th>
<th>Anticipated changes</th>
</tr>
</thead>
</table>
| 1  | Heighten parental involvement and encourage students to work assignments regularly to boost up their performance | All teachers and school principals                            | CPD vice principal and school counselor       | 1st and 2nd semester | ● Improvement in student performance  
● Student interest in work assignments  
● Increase in the number of students doing assignments |
| 2  | Increase student mathematics performance                                        | Vice principal and teachers in the department                | CPD vice principal                            | 1st and 2nd semester | ● Improvement in student performance  
● Show interest and appreciation in technology and mathematics |
| 3  | Increase teachers awareness of the importance of continuous assessment         | All teachers and school principals                           | CPD vice principal                            | 1st and 2nd semester | ● Raise teachers awareness on continuous assessment  
● Follow-up and support students |

In order to achieve the anticipated changes, strategies are devised by the department and individual teacher. The sixty hour allocated CPD time is further divided into different activities in line with the three basic priority areas. The following are some of the strategies devised by the department to achieve the target goals:

- Engage in discussion among teachers in the department, students and parents
- Identify possible reasons for students not doing assignments
- Hypothesize possible attributions and solutions to the problem
- Conduct classroom based action research to solve the problem
- Visit cluster schools and grasp useful experiences and arrange classroom observations
- Document portfolios based on information from feedback
- Identify low performing students and prepare tutorial and other remedial programs for the students
- Hold discussion forums on the importance of continuous assessment
- Conduct training on continuous assessment.

Formats and working procedures are also in place to follow up the implementation of the activities. Minutes, checklists, parental letters and records of students who don’t work on their assignments, are some of the procedures used by teachers and the vice principal to follow-up on the day-to-day results of the CPD program. An important component of the CPD cycle is the evaluation stage. To what extent the problems identified by the school community have been reduced as a result of these implementation strategies and which procedures work to
contribute to student learning should be documented and shown in measureable terms. However, objectively verifiable criteria are not set at the planning stage and ways to measure the outcome against the set criteria are not clearly shown.

4.2 Discussion

This research has examined the effectiveness of the CPD program in selected primary schools in Addis Ababa city. More specifically, it examined the relationship between teacher demographic factors (sex, qualification, grade level at which teachers teach, teaching experience) and selected CPD variables (e.g., self reflection, action research, mentoring). The study also examined teacher views of essential conditions for the effective implementation of school based CPD. The overall trends and major barriers to the implementation of the program were also studied.

With the exception of a few cases, teachers hold favorable views on the need for a school based continuous teacher professional development program. In the view of the teachers, school based continuous professional development introduces a structured framework at different levels (school, CPD committee, department and individual teacher). Results show that the program sets a direction and regulatory mechanism to ensure teacher engagement in an on the job learning task on a continual basis. It opens a window of opportunity for addressing problems and challenges that affect the quality of education.

Teachers covered in the study reflected a positive and supportive views on school based continuous teacher professional development. The new CPD, according to most of the teachers, facilitates the easy flow of information and feedback among teachers, cluster schools, and the management. Teachers believe that CPD facilitates documentation of better practices and success stories in the form of portfolios and anecdotal records. The results further show that teachers develop an individual plan for CPD activities and keep records of their work in the form of notes, sample work, action research reports, etc; that go into their portfolios.

The extent teachers engage in self-reflection exercises for monitoring and evaluating their own work beyond compiling portfolios was examined. Results show that male teachers tend to monitor and evaluate their performance more than female teachers using various strategies such as peer discussions and assembling good practices. This difference could be explained in relation to the contextual factor. Female teachers carry an equal load with their male counterparts. They are expected to engage in CPD programs on an equal basis. Nevertheless, they shoulder more social and family responsibilities. They have more stress due to time constraints which could limit the extent of their engagement in self-reflection and peer discussion practices.

Compared to teachers teaching in the first cycle, teachers teaching in the second cycle showed better and higher involvement in self-reflection, in engaging in peer discussions on their daily teaching activities and in assembling best practices more frequently in their portfolios. This difference could be attributed to differences in qualifications as relatively higher qualifications are associated with teacher assignment to teach in the second cycle. Teachers with higher qualifications, generally those teaching in the second cycle, held more favorable views
on essential conditions for CPD (e.g.; the need for and relevance of the school based teacher professional development). The fact that the second cycle deals with more advanced concepts and the advanced stage of pupils’ overall development could compel teachers to seek answers to many questions and challenges through the CPD program. This explanation, however, does not imply that teaching in the first cycle is easier for teachers.

Teachers identified action research as contributing the most and being the preferred area of activities for teacher professional development. Action research as a model of CPD has been acknowledged as successful in allowing teachers to ask critical questions on their practice (Burbank & Kauchack as cited in Kennedy, 2005). Despite the time constraints and problems of lack of experience, teachers generally hold favorable views on the need for doing action research. Teachers also hold positive views on mentoring, school in-house workshops, advice from colleagues and directives from the school leadership as supportive in implementing the CPD program in their respective schools.

Mentoring is a one-to-one relationship, generally between one senior and the other a junior teacher. Mentoring often implies a counseling and supportive relationship where one partner is novice and the other more experienced (Rhodes & Beneicke, as cited in Kennedy, 2005; Clutterbuck, as cited in Kennedy, 2005). In the Ethiopian context, mentoring is practiced particularly during the induction of new teachers in the first two years. It is assessed by teachers as an important contributing factor for teacher professional development. However, variations were observed among teachers on the extent of its importance.

The results on the other hand indicate that the CPD programs run at schools face serious challenges and drawbacks. Although there were teachers who held supportive views of the new CPD, many teachers had a pessimistic position about the program. Results show that the school based CPD is too ambitious in terms of what is expected from teachers. Many teachers reported experiences of stress and work overload problems in connection with the CPD activities.

Research that supports the teacher change model explains that teacher commitment to their profession increases with their exposure to innovative ideas and principles about teaching and their active involvement in practicing these ideas in the classroom. Moreover, teacher anxiety and confusion gradually drops and an understanding of the structure and rationale of the innovative instruction program grows as mastery is achieved indicating the precedence of behavioral change to changes in attitude and belief systems (Guskey, 2002; Huberman cited by Guskey, 2002).

Knowledge and understanding of the objectives, contents and methods of CPD were found to be among the determinant factors affecting the quality of implementation of the program. Results showed gaps in knowledge and understanding about CPD among trainers and trainees who were expected to organize the training in their respective schools. It appears this situation has resulted in a low level of understanding on the part of the teachers who are the major targets of the CPD program.

The limitations observed in the connection between knowledge and understanding could be explained in reference to particular drawbacks related to the initial training. First, the training
material (CPD toolkit was lengthy and not reader friendly) erodes motivation and instills frustration among teachers. Second, as reported by the teachers, the duration of the training was very short; hence, the training given was inadequate. Third, the knowledge and experience of trainers at the central level was questionable. Fourth, further professional support at the school level has been missing. Fifth, those who were trained as trainers faced budget limitations to organize training at their respective schools. In brief, sufficient opportunities were not created for teachers to develop knowledge and understanding of the objectives, contents and methods of the CPD program. Hence, it would be difficult to assume that the training met the objective of enabling teachers to understand and implement the CPD program.

Teacher attitudes emerged as another important factor in influencing the quality of implementation of school based teacher professional development. The results show that teachers were not enthusiastic about the CPD program. Lack of interest and commitment, lack of supportive attitudes toward the CPD program and a low level of collaborative learning were observed among teachers. In the view of the teachers, the new CPD is coined and implemented in relation to peripheral topics (for instance, student discipline, parental involvement, etc) that are indirectly related to student learning. Low public respect of the teaching profession, limited involvement of communities in the education of their children and lack of student interest in learning affected teacher overall attitudes towards teaching and the quality of their work in relation to the CPD program.

A review of teacher views indicate leadership and policy related issues as other areas of concern for the effective implementation of the CPD program in schools. Similar to the situation with teachers, officers involved in the coordination of the program lack clear understanding on CPD and its implementation strategy. Lack of commitment as well as timely and regular follow up on the part of the coordinating body was also reported as visible challenges. It appears the promises made by the Ministry of Education in relation to certifying teachers through the CPD program have been abandoned. Moreover, lack of incentives particularly for teachers that have achieved the highest possible rank in teacher career structure, frequent change in the school leadership and failure to mobilize resources to support CPD programs at the school level appear to contribute to confusion and a lack of direction among teachers. Teacher interest in teaching, among other conditions, is influenced by prospects for advance in the profession.

5. Summary

Teacher responses to open-ended questions in the self-report questionnaire revealed a series of problems that affected the implementation of the CPD program at the school level. One of the major problems reported by teachers deals with the issue of knowledge and understanding on the essence of the CPD program. This point was explained in reference to teachers, CPD coordinators, school principals and trainers each of which are involved in the program in different ways and at various levels.

A lack of adequate knowledge and experience in CPD was one source of problems as
reported by teachers. Teachers and principals who participated in the initial training as would be trainers could not help develop a clear understanding of the program; hence, teachers view the contribution of this group as trainers at their own schools as limited. Another dimension of the issue relates to the knowledge of the coordinators of the program at the school level. A review of teachers’ views indicates that officers involved in the coordination of the program do not have a clear understanding about CPD and its implementation strategies. It appears this situation has resulted in a low level of understanding on the part of the teachers who are the major targets in the CPD program.

The gap in the knowledge and understanding of teachers and coordinators on CPD, as noted by teachers, was attributed to problems associated with the duration of the training period, lack of experience of the trainers and inadequate discussion and understanding at the inception stage. A review of the experiences of selected primary schools confirmed this assertion. Before the launching of the new CPD in February 2011, sub-cities education offices organized five days of training for school leadership (principals and deputy principals) followed by two days of in-house training for all teachers in the respective schools headed by the vice principals. Subsequently, each teacher was provided with the guide material prepared on the new approach to CPD implementation.

This shaky start of the program without adequate training and preparation was also a concern of the focus group discussion participants in three purposefully selected primary schools. Focus group participants, for example, disclosed that the training was given only for two days for some teachers. In addition, the lack of a budget to organize school-level training on a continuous basis was a problem indicated by focus group discussion participants. Based on this evidence, one can reasonably argue that the quality of the initial training program had notable drawbacks. Hence, it would be difficult to assume that the objective of enabling teachers to understand and implement the CPD program at the school level has been met.

Another area of problem strongly linked to the inception stage is the induction of the new CPD toolkit which was introduced in the year 2011. The MOE developed and disseminated a national framework which serves as a guide for primary and secondary schools in running school based CPD. The toolkit envisions detailed activities to be worked out by individual teachers and departments and at school levels the expected outcomes for the CPD program. However, teacher responses to open ended questions in the self-report questionnaire characterized the CPD toolkit as lengthy and unattractive. The new CPD toolkit, however, has a number of properties worth mentioning in comparison to the old one. Focus group discussion participants in one of the primary schools for example stated:

The old CPD was monotonous, ambiguous, full of inconsistencies and something that does not address school-based problems and detached from context. (Focus group discussion with CPD committee members)

The new CPD follows a different approach. It aims at up-dating and upgrading teachers
in terms of knowledge and adjustment in career structure based on school based activities. Here, schools are expected to identify three priority problems out of which each teacher selects and implements one based on his/her interest and area of study. In other words, a plan for teacher professional development is developed and implemented by each school with active participation of teachers both in groups at the department level and at the individual teacher level.

Participants were asked to explain the unique features of the new CPD program and what opportunities exist to encourage teachers to participate actively in the program. The distinguishing feature of the new CPD program according to one discussant is the bottom-up approach.

Teachers plan, teachers implement, teachers evaluate. In the new approach teachers are the sole owners of the program (Focus group discussion with CPD committee)

In line with the new CPD guideline, schools are expected to identify problem areas that have immediate significance to their context. Each school at an individual, department and institutional level is expected to develop a module plan along the identified priority areas, work out detailed procedures on how to execute these priority areas and devise monitoring and evaluation strategies. National policies and strategies are considered in selecting priority areas of interventions at schools.

Document analysis carried out in one of the primary schools, for example, shows the modalities adopted. At the start, teachers, students and parents had a meeting and discussed a wide array of problems to identify twenty problems that were related to the CPD program. Further analysis of the problems enabled identification of the three top-problems that needed immediate attention and resource mobilization in this particular school context. The three priority agenda items of the school are: 1) heighten parental involvement and encourage students to do assignments regularly to boost up their performance; and 2) increase student performance in mathematics; and 3) increase teacher awareness on the importance of continuous assessment. It is around these three problems that each subject teacher, department, and principal worked out their respective module plans. In order to achieve the anticipated module plans, procedures are devised at all levels. The sixty–hour allocated CPD time is further apportioned into different activities in line with the three basic priority areas.

Formats and working procedures are also in place to follow up the implementation of the activities. Minutes, checklists, parental communication letters, records of students who don’t work their assignments, are some of the procedures used by teachers and the vice principal to follow-up day-to-day operations of the CPD program. An important component of the CPD cycle is the evaluation stage. To what extent the problems identified by the school community have been reduced as a result of these implementation strategies and work procedures and contributed to students’ learning is not substantiated by evidence in measurable terms.

Despite the opportunities that can be reaped from the practice of the new CPD, program
implementation seems to be entangled with a number of human and organizational problems. Interviews with deputy principals disclosed that in many cases, teachers show low interest in participating in meetings for discussions on CPD. Focus group discussions conducted in schools substantiate the view of deputy principals. A focus group participant for example stated that:

Commitment of each teacher is a key to program sustainability. Teachers should be convinced to be committed to their profession. As it is mandatory we believe that it will sustain. There are many teachers who are being convinced about its importance and usefulness. Step by steps it will become the day to day routine of teachers. It will sustain (Focus group discussion with CPD committee)

The absence of certification and lack of a clear scheme to motivate teachers to engage in CPD activities on a continuous basis, as noted by teachers, have contributed to the fall in teacher interest and commitment. As a solution to this problem, participants noted the importance of establishing a procedure to recognize and reward the efforts of hard working teachers. A participant of the focus group discussion noted:

The promises made by the Ministry of Education in relation to certifying teachers through the CPD program have never been implemented. This situation has led to confusion and lack of direction on the part of teachers. This situation would have negative impact on continuity and sustainability of the CPD activities by teachers (Focus group discussion with CPD committee)

Qualitative data captured from open ended questions, FGDs, interviews and an analysis of documents such as portfolios, checklists and minutes clustered around three thematic areas namely opportunities, challenges, and useful experiences.

Opportunities
- The new CPD follows a bottom-up approach. It is planned, executed, analyzed and evaluated at the school level. Hence, it created opportunities for contextualizing the program
- Career development as a motive for executing CPD at the school level
- Opportunities for self-enhancement, improvisation of the quality of education
- CPD empowered teachers

Challenges
- Lack of knowledge and experience in the theoretical underpinnings and implementation modalities of CPD among teachers, principals, and trainers which were seen in inconsistencies, lack of uniformity, confusion and redundancy
- Lack of budget to run the program at the school level
• Lack of interest, initiative and commitment by some teachers especially by teachers with long years of teaching experience
• Becoming too ambitious and looking for immediate return from the CPD program
• The incomparable nature of the sixty-hour time demand and work load of teachers
• The detailed nature of the Toolkit is neither handy nor motivating and instills frustration
• Lack of incentive procedures to recognize teachers who make the utmost effort to change themselves and their colleagues
• CPD module plan is coined and implemented in relation to peripheral issues that are indirectly related to student learning.

Useful experiences
• Opened a window of hope in practicing a student-centered approach, improvement in student learning, reduction in school-based disciplinary problems
• Facilitated easy flow of information and feedback among teachers within a department, cluster schools, and the management at large. The territory has become porous
• Facilitated documentation of better experiences and success stories in the form of portfolios and anecdotal records.

6. Conclusions

Most of the primary school teachers in the sampled schools believe that a school based teacher professional development program is important as it focuses on core issues – teacher professional development and improving the quality of education. Teachers are widely engaged in developing CPD modules (individual plans), implementing the plan and assembling samples of their work in the form of portfolios. On the other hand, many teachers appear pessimistic in their views on the real contributions of the program to improve in teacher knowledge, skills and attitudes. Teacher activities on CPD could be genuine efforts to learn and improve their performance. On the contrary, they could be done merely to meet formal requirements.

The new CPD appears mandatory. All teachers in all schools are engaged in the implementation of the program in one way or another. Teachers were able to document their experiences and success stories (e.g. sample work, action research reports) in the form of portfolios. Whether, this practice enhanced student learning or not is yet to be established.

Teacher perceptions about CPD practices in schools differ by gender, qualifications and level in the cycle of teaching. Male teachers tend to monitor and evaluate their performance more frequently than their female counterparts. Teachers with higher qualifications who, in most cases, were assigned to teach in the second cycle show better and higher involvement in self-reflection and in discussions on their daily teaching activities. They assemble their best practices more frequently.

Teachers view action research and mentoring as the most contributing and preferred area of activities that contribute to their professional development. On the other hand, the training
program organized and the toolkits prepared on CPD were viewed as deficient. Hence, teacher readiness to effectively engage in the CPD program is questionable.

References


