



**ASSESSMENT OF MODEL SECONDARY SCHOOLS' CAPACITY FOR
SUSTAINABLE IMPROVEMENT IN OROMIA REGIONAL STATE**

BY

BEGASHAW MAMUYE

A DISSERTATION SUBMITTED TO
COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES, DEPARTMENT OF
EDUCATIONAL PLANNING AND MANAGEMENT AT ADDIS ABABA UNIVERSITY
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY IN EDUCATIONAL POLICY AND LEADERSHIP

ADDIS ABABA
JANUARY, 2018

DECLARATION

I hereby declare that this dissertation entitled "Assessment of Model Secondary Schools' Capacity for Sustainable Improvement in Oromia Regional State" is my own work and has not been previously submitted to this University or any other institution in application for admission to a degree, diploma, or other qualifications.



Begashaw Mamuye

January, 2018

CERTIFICATE

This is to certify that the dissertation entitled "Assessment of Model Secondary Schools' Capacity for Sustainable Improvement in Oromia Regional State" submitted for the award of degree of Doctor of Philosophy in Educational Policy and Leadership is an original work by Begashaw Mamuye under my supervision. I confirm that this dissertation satisfies the requirements and fully adequate in scope to qualify as a Dissertation for the Degree of Doctor of Philosophy in Educational Policy and Leadership.

Dr. Jeilu Oumer

Internal Advisor, Addis Ababa University, Ethiopia

Signature  Date _____

Professor James Williams

External Advisor, George Washington University, USA

Signature _____ Date _____

ADDIS ABABA UNIVERSITY

COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES

The dissertation written by Begashaw Mamuye, entitled "Assessment of Model Secondary Schools' Capacity for Sustainable Improvement in Oromia Regional State" and submitted in partial fulfillment of the requirements for the Degree of Doctor of Philosophy in Educational Policy and Leadership complies with the regulations of the university and meets the accepted standards with respect to originality and quality.

Signed by the examination committee

Bekit Kebede (Prof) Signature Melkash Date March 27, 2018

External Examiner

David Melkash Signature [Signature] Date _____

Internal Examiner

Fetsi Omer Signature [Signature] Date _____

Advisor

ABSTRACT

The main purpose of this study was to assess how well model secondary schools in implementing school improvement program (SIP) in Oromia Regional State have developed (built) capacity for sustainable improvement. To this effect, the study was employed concurrent mixed method design. Five level Likert Scale questionnaires were used to collect quantitative data from teachers, school principals, department heads, and students. On the other hand, qualitative data collection methods were interview, document analysis, student focus group discussion (FGD), and observation. The informants for interview were teachers, school principals (the heads), supervisors, and Parent Teacher Associations (PTAs). Mean and standard deviations were the major descriptive statistics for analyzing the quantitative data. Among inferential statistics, independent sample t test, Mann-Whitney U test, and one-way ANOVA were applied at $\alpha = 0.05$ significance level. For the analysis of qualitative data, inductive process of data reduction and categorization into themes were applied apart from descriptive narration. It was found that the schools have good capacity in most of the aspects of capacity dimensions included in the study in spite of certain gaps. Planning capacity, leadership capacity, staff performance with a sense of professional learning community (PLC), the empowerment and the engagement of students, and the engagement of parents/community were found to be adequate. The major capacity gaps include the learning norm/practice of the staff was not as adequate as collaborative norms/practices; weakness in the quality of school self-evaluation and in consideration of the feasibility of school improvement objectives/targets; and lack of student self-control of their learning. Besides such capacity gaps, the study was found several challenges that have adverse effect on the sustainability of school improvement. From the finding, it is plausible to conclude that the schools have good capacity to sustain the improvement they embarked on. However, it requires that the capacity gaps and challenges identified in this study should be resolved or ameliorated. Including the schools, each party at different levels of education management (woreda/district, regional education bureau and ministry of education) has important part to play in resolving and/or ameliorating the capacity gaps and the challenges. Among others, the regional state should give attention to building the leadership capacity of the schools by attracting and selecting competent and experienced teachers to school leadership position. In the schools, although the collaborative norms practices were remarkably appreciable, attention should be given to improve and deepen the learning of the staff and the students. Besides, capacity limitation in terms of financial and physical facilities needs to be resolved. Government block grant to schools should grow as with the school grant and the community contribution to solve the problem in the inadequacy of school facilities and infrastructures.

AKNOWLEDGEMENTS

I am very much indebted to my advisors, Professor James Williams and Dr. Jeilu Oumer, and to all individuals, groups, and institutions that have contributed to the success of my study.

First of all, I am very much grateful to Professor James Williams, external advisor, George Washington University, for the kindly cooperation and guidance he offered me in writing this dissertation. I have a great appreciation to Professor James' patience, his thorough reading of the manuscript and giving me constructive comments. My sincere gratitude extends to Dr. Jeilu Oumer, internal advisor, Addis Ababa University, for his guidance, constructive comments, and kindly encouragement he offered me during carrying out this dissertation.

Besides, I would like to thank school principals, teachers, school supervisors, students, and PTAs of the sample schools for their genuine cooperation in completing the questionnaires and providing me with valuable data for the research. I would like to extend my special gratitude to school principals for providing me with the necessary documents and for their unreserved support in coordinating teachers, students and PTA members for interview and completing questionnaires.

I am also indebted to Addis Ababa University for giving me the opportunity to join PhD program and providing me some financial support during the study. My special thanks extend to the Department of Educational Planning and Management for coordinating and facilitating the program.

Finally, I would like to express my heartfelt gratitude and appreciation to my wife, Abaynesh Jiru, without whom support and encouragement the completion of this study would have been impossible. I am very grateful to her support and encouraging me throughout my study. In addition, I am very grateful to my lovely kids, Kena, and Aanan (Aana) Begashaw, for their understanding and moral support to my study.

TABLE OF CONTENTS

ABSTRACT.....	i
ACKNOWLEDGEMENTS.....	ii
TABLE OF CONTENTS.....	iii
LIST OF TABLES.....	vii
LIST OF FIGURES.....	x
LIST OF ABBREVIATIONS AND ACRONYMS.....	xi
CHAPTER ONE: INTRODUCTION.....	1
1.1. Background of the Study.....	1
1.2. Overview of the Context of the Study Area.....	7
1.3. Statement of the Problem.....	9
1.4. Basic Research Questions.....	15
1.5. Objectives of the Study.....	17
1.6. Significance of the Study.....	17
1.7. Delimitations of the Study.....	18
1.8. Limitations of the Study.....	19
1.9. Organization of the Study.....	19
1.10. Conceptual Framework of the Study.....	19
1.10.1. Conceptual Theory.....	19
1.10.2. Conceptual Model.....	21
1.11. Operational Definitions of Key Terms.....	24
CHAPTER TWO: REVIEW OF RELATED LITERATURE.....	28
2.1. The Evolution of School Improvement Paradigm.....	28
2.2. The Major Tenets of School Improvement Paradigm.....	34

2.3. Capacity for Sustainable School Improvement.....	35
2.3.1. Perspectives on Capacity for Sustainable School Improvement	35
2.3.2. Professional Learning Community of School as School Capacity.....	39
2.3.2.1. The Notion of Professional Learning Community of School	39
2.3.2.2. Professional Learning Community of Staff as School Capacity	41
2.3.2.3. Characteristics of Professional Learning Community of School.....	42
2.3.2.4. Factors that Affect the Sustainability of School PLC and Challenges	47
2.3.3. Leadership as Capacity for Sustainable School Improvement	50
2.3.3.1. School Principal’s Leadership Practices for Sustainable School Improvement	51
2.3.3.2. Distributed Leadership as School Capacity	57
2.3.3.3. Teacher Leadership as School Capacity	59
2.3.4. School-Based Continuous Professional Development of Teachers as School Capacity	63
2.3.5. Culture as School Capacity	66
2.3.6. Empowerment and Engagement of Students, Parents and the Community as School Capacity	69
2.3.6.1. Empowerment of Students as School Capacity	69
2.3.6.2. Engagement of Students as School Capacity.....	71
2.3.6.3. Empowerment and Engagement of Parents and the Community as School Capacity.....	73
2.3.7. Planning as School Capacity	75
2.3.7.1. Qualities of School Improvement Strategic Plan.....	78
2.3.7.2. Qualities of Annual School Improvement Plan	79
2.3.8. School Improvement Program in Ethiopia.....	80

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY	87
3.1. Research Paradigm Underpinning the Research Methodology and the Assumptions.....	87
3.2. Research Method	88
3.3. Sources of Data	90
3.4. Sample Schools	90
3.5. Background of Sample Schools.....	91
3.6. Target Population, Samples and Sampling Techniques.....	96
3.7. Methods and Procedures of Data Collection	98
3.7.1. Instruments and Procedures of Quantitative Data Collection.....	98
3.7.1.1. Instruments of Quantitative Data Collection.....	98
3.7.1.2. Procedure for Establishing Validity and Reliability of Questionnaires.....	100
3.7.1.3. Validity and Reliability of Questionnaires.....	102
3.7.1.4. Procedure of Quantitative Data Collection.....	104
3.7.2. Methods and Procedures of Qualitative Data Collection.....	105
3.7.3. Transcript Codes	110
3.8. Methods and Instruments of Data Analysis and Interpretation	113
3.8.1. Methods and Instruments of Quantitative Data Analysis	114
3.8.2. Methods of Qualitative Data Analysis.....	116
3.9. Ethical Considerations	118
CHAPTER FOUR: PRESENTATION, ANALYSIS AND INERPRETATION OF DATA	119
4.1. Demographic Characteristics of the Respondents	119
4.2. Analysis and Interpretation of Data	123
4.2.1. Capacity of the Schools in Preparing School Improvement Plan	123
4.2.2. Staff Performance with a Sense of Professional Learning Community	131

4.2.3. Leadership Capacity of the Schools	151
4.2.4. Empowerment and Engagement of Students, and Engagement of Parents/Community.....	173
4.2.5. Human, Financial and Physical Resources Facilities Capacity of the Schools.....	192
4.2.6. Major Challenges for Sustainable School Improvement.....	202
4.2.7. Progress in Student Academic Achievement in the Past Four Consecutive Years	208
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	210
5.1. Summary of Major Findings	211
5.2. Conclusions.....	229
5.3. Recommendations.....	233
5.4. Implications (Theoretical and for Research).....	247
REFERENCES.....	251
APPENDICES.....	270
Questionnaires (Appendix A, B, & C).....	270
Interview Guides (Appendix D, E, F).....	284
Student FGDs Guide (Appendix G).....	289
Observation Guide (Appendix H).....	290
Document Analysis Guide (Appendix I).....	291
EPFA Pattern and Component Loading Coefficients (Appendix J, K, L, M, N)	293

LIST OF TABLES

Table	Page
Table 1: Target Population, Samples and Sample Size by School	97
Table 2: Areas of Interview and Interview-Transcript Codes by Groups of Participants, and the Research Question to Address.....	113
Table 3: Academic Staff Respondents by Sex, Age, and Qualification	120
Table 4: Academic Staff Respondents by Years of Service and Career Stage.....	121
Table 5: Student Respondents by Grade level, Sex, and Age.....	122
Table 6: School Principals and Department Heads’ View of School Planning Capacity.....	124
Table 7: Teachers’ Perception of the Vision and Values of the Schools.....	132
Table 8: Teacher’ Perception of Collaborative Work Culture in Schools.....	136
Table 9: Teachers’ Perception of School-Based CPD Practice	141
Table 10: Difference in Teachers’ Perception of School-Based CPD Practices across Levels of Career Stages.....	144
Table 11: Teachers’ Perception of Collaborative/Collective Learning Practice in Schools.....	146
Table 12: Teachers’ Perception of Supportive Conditions for PLC of School.....	147
Table 13: Teachers’ Perception of Shared Personal Practice	149
Table 14: Teachers’ View of School Principals’ Leadership Practice in Building Shared Vision	152
Table 15: Teachers’ View of School Principals’ Leadership Practice in Building Sense of Purpose and High Expectation	154
Table 16: Teachers’ View of School Principals’ Leadership Practice in Understanding Individuals and Providing Support to Staff	157
Table 17: Teachers’ View of School Principals’ Leadership Practice in Intellectual Stimulation and Modeling Important Values.....	159

Table 18: Teachers’ View of School Principals’ Leadership Practice in Re-structuring Internal Organization of the School	162
Table 19: Teachers’ View of School Principals’ Leadership Practice in Building Collaborative Culture and Climate of Trust.....	163
Table 20: Teachers’ View of School Principals’ Leadership Practice in Connecting School with Local Community.....	165
Table 21: Teachers’ View of School Principals’ Leadership Practice in Managing the Teaching Learning Program.....	167
Table 22: Teachers and School Administrators’ View of the Practices of Shared Leadership	170
Table 23: Students’ View of their Empowerment in Taking responsibility for Self-Control of Misbehavior and Learning	174
Table 24: Students’ View of their Participation in Decision Making and Presenting Student Problems to the School Administration	178
Table 25: Comparison of Male and Female Students’ View of Student Empowerment	179
Table 26: Students’ Perception of their Behavioral Engagement.....	180
Table 27: Students’ Perception of Teacher-Related Factors Affecting Student Academic Engagement	182
Table 28: Students’ Self-Report of their Active Involvement in Classroom Learning	185
Table 29: Students’ Self-Report of their Affective Feeling/Identification with School.....	187
Table 30: Comparison of Male and Female Students’ Perception of Student Engagement.....	189
Table 31: School Principals and Department Heads’ View of the Engagement of Parents/Community	190
Table 32: School Principals and Department Heads’ View of Teachers’ Professional Competence	193

Table 33: School Principals and Department Heads’ Rating of Teachers’ Commitment to Sustainable School Improvement	195
Table 34: School Principals and Department Heads’ View of Financial Resource Capacity of Schools	198
Table 35: Students’ Rating of the Adequacy of School Physical Facilities	200
Table 36: Progress in Student Achievement at Grade 10 National Examination in Four Consecutive Years (2012-2015)	208

LIST OF FIGURES

Figure 1.1: Map of Oromia Regional State.....	8
Figure 1.2: Dimensions of School Capacity for Sustainable Improvement.....	21
Figure 1.3: Conceptual Model of the Study.....	22
Figure 2.1: School Improvement Framework of Ethiopia.....	82
Figure 3.1: Concurrent Mixed Method (Quan +Qual).....	90

LIST OF ABBREVIATIONS AND ACRONYMS

ADC	Austrian Development Cooperation
CPD	Continuous Professional Development
EFA	Education for All
EPFA	Exploratory Principal Factor Analysis
ESDP	Education Sector Development Program
ETP	Education and Training Policy
FDRE	Federal Democratic Republic of Ethiopia
GEQIP	General Education Quality Improvement Program
GER	Gross Enrollment Rate
GTP	Growth and Transformation Plan
IQEA	Improving the Quality of Education for All
ISIP	International School Improvement Project
MoE	Ministry of Education
MoFED	Ministry of Finance and Economic Development
NCP	National Planning Commission
NEAEA	National Educational Assessment and Examination Agency
NER	Net Enrolment Rate
NLA	National Learning Assessment
NLAs	National Learning Assessments
NOE	National Organization of Examination
OBoFED	Oromia Bureau of Finance and Economic Development
OEB	Oromia Education Bureau
PLC	Professional Learning Community
PLCs	Professional Learning Communities

SIP	School Improvement Program
UK	United Kingdom
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
USA	United States of America
USAID	United States Agency for International Development
USAID/IQPEP	USAID/Improving Quality of Primary Education Program

CHAPTER ONE

INTRODUCTION

This chapter treats the background of the study, the context of the study area, statement of the problem, basic research questions, objectives of the study, significance of the study, delimitations of the study, limitations of the study, the conceptual framework of the study, the organization of the study, and operational definitions of key terms.

1.1. Background of the Study

The central place that education quality and equity have assumed the policy concern of developed and developing countries is evident in their current education reforms that emphasize school improvement approach as strategy to cope with the problem of quality and equity. As an approach to improve the quality of education, school improvement has come to take the centre stage within the education reform of low income countries, including Ethiopia, only after the international forum of Education for All (EFA) in 2005. The EFA (2005) report indicates that many African countries included in assessment study by SACMEQ (Southern and Eastern African Consortium for Monitoring Education Quality) had much poorer quality of education. To ameliorate the problem, EFA (2005) recommended, among others, the policy of promoting “school improvement program” with a robust long-term vision for better schools with quality as persistent visual ingredient (EFA, 2005 Global Monitoring report). It states:

As the learner is at the heart of the learning process, so the school is at the center of education system. It is where investment designed to improve the quality of education come together in the teaching and learning process. Reforms to improve quality should give weight to enabling schools to improve their own performance (p.169).

In EFA (2005) Global Monitoring report, Ethiopia was in a category of countries half way towards EFA goals (EFA index = 0.541). In fact, the problem of access, equity and

quality of education had its root in the prior regime of the country. When the current government came to power by overthrowing the prior Durge regime, the education system of the country was suffering from multifaceted problems related to access, quality, relevance, and equity (MoE, 1994). Thus, it had become imperative for the government to design and implement a long term new Education and Training Policy (ETP) in 1994 to address the problems.

ETP expresses the government's pledge of improving access, quality, equity, and relevance of education. In implementing the new ETP, the government developed a series of five-year Education Sector Development Programs (ESDP) and action plans. The first four Education Sector Development Programs (ESDP I, ESDP II, ESDP III, and ESDP IV) were implemented and evaluated. At the time this research was conducted, ESDP V, which had the life span of five years from 2015/16 to 2019/20, was under implementation.

In the implementation of ESDP I, ESDP II, ESDP III, and ESDP IV, the country was made enormous achievement in terms of access to education. The Gross Enrollment Rate (GER) of primary education (Grades 1-8) was increased from 26% in 1994 (MoE, 1994/5) to 102.7% in 2014 (MoE, 2014/15) and the GER of secondary education (Grades 9-12) was increased from 8% in 1994 (MoE, 1994/5) to 39.8 % (Grades 9-10) in 2014 (MoE, 2014/15). It can be said that Ethiopia has done quite well in meeting the Millennium Development Goal of achieving Universal Primary Education and reducing Gender disparity. The Net Enrollment Rate (NER) of primary education (Grades 1-8) was increased in the past fifteen years from 48.8% in 2000/2001 to 94.3% in 2014/2015 (MoE, 2014/15: 46). On the other hand, Gender Parity Index for primary education (Grades 1-8) was improved from 0.70 in (MoE, 1999/00) to 0.92 in 2014/15 (MoE, 2014/15). For secondary education, Gender Parity Index was increased from 0.80 in 2009/10 to 0.93 in 2014/15 for first cycle secondary

(Grades 9-10) and from 0.57 in 2009/10 to 0.87 in 2015 for second cycle secondary (MoE, 2014/15: 75).

However, despite such appreciable achievement in quantitative expansion, empirical evidences (e.g., Amare, et al., 2006; Derebssa, 2006; USAID/Ethiopia, 2010; World Bank, 2005) indicate that the education of the country was suffering from serious quality problems. Above all, a series of National Learning Assessments (NLAs) of Grade 4 and Grade 8 students conducted in 2004, 2008, and 2012 provide a more concrete evidence that the quality of education was very low (see, for example, ESDP V - i.e., MoE, 2015; & others NOE, 2004a, 2004b; NEAEA, 2013). As discussed in ESDP V, the average composite score of Grade 4 and Grade 8 students was found to be below 50% throughout NLAs conducted in 2004, 2008, and 2012. Indeed, the National Learning Assessment (NLA) of Grade 10 in 2010 and 2014 revealed low student achievement – i.e., the average composite score of student achievement was below 50%, except a slight progress being made in 2014 NLA compared to the 2010 NLA. Furthermore, Early Grade Reading Assessment (EGRA) of Grades 2 and 3 conducted in 2010 revealed that children in first-cycle-primary education were not developing the basic skills required to learn effectively in later years (USAID/Ethiopia, 2010).

Thus, cognizant of the low quality of education the Government of Ethiopia started giving attention to improving the quality of education since 2007. The Government was launched in 2007 a nationwide General Education Quality Improvement Program (GEQIP) to improve the quality of general education (Grades 1-12).

GEQIP has six interrelated components that work together to improve the quality of education (MoE, 2006a, 2008). School Improvement Program (SIP) is one of the six components of GEQIP and has the underlying goal of improving student learning and learning outcome. Each component of GEQIP is closely linked to other components and that

each level of education management (national, regional, Zonal, woreda/district, and school) has its respective responsibility for the implementation of each component (MoE, 2008). At school level, GEQIP and SIP have a systematically integrated linkage (relationship) to impact on student learning and learning outcomes. That is, just as do the domains of SIP are geared towards the central goal of improving student learning and learning outcome, the components of GEQIP are trickled into the four domains of SIP to impact on student learning and learning outcome. This is evident from official documents of Ministry of Education (e.g., MoE, 2010c, 2011).

The first Growth and Transformation Plan (GTP I) of Ethiopia (2010/11-2014/15) as well as ESDP IV (2010/11-2014/15) emphasized giving due attention to improving and ensuring the quality and efficiency of general education. In GTP I, the Government underlines that GEQIP will be fully implemented and its subsequent impact on student achievement will be verified through regular monitoring and evaluation so as to secure feedback for further enrichment of GEQIP and to realize access to quality education for all (p. 86). In second Growth and Transformation Plan (GTP II), the Government strongly expressed that it continues its effort to improve the quality of general education through the furtherance of the implementation of GEQIP in a coordinated and organized manner during GTP II. In the same vein, Ministry of Education (MoE, 2015: 35) remarks that “great efforts are underway to improve the quality of education and these must continue with a focus on core foundation skills in early grades . . .” during ESDP V.

GEQIP and its sub-component SIP is a nationwide reform within the framework of decentralized education management bestowed to regional states and administrative regions of the country. Accordingly, all public primary and secondary schools in the Regional States and chartered Administrative Cities of the Federal Democratic Republic of Ethiopia had embarked on implementing the program in 2007.

This study was targeted Oromia Regional State. Since the implementation of SIP in Oromia Regional State in 2007, the regional education bureau selects every academic year one or more best performing schools in implementing GEQIP in general and SIP in particular as model schools to share experience to others. The selection was grounded on the extent of school's performance in seven performance areas, each performance area consisting of many rating items on scale labeled as *low start* (value = 1), *medium* (value = 2), *high* (value = 3), and *very high* (value = 4). These performance areas are (i) the organization and outcomes of organizing teachers and students into collaborative groups of shared purpose; (ii) curriculum implementation (student-centered teaching, continuous assessment, library service, textbook distribution, etc.); (iii) school-based continuous professional development of teachers; (iv) SIP (student support, and school environment, which includes compound beatification, fulfillment of facilities such as toilets, water, pedagogical center, laboratory service, etc.), (v) leadership and management, (vi) civic and ethical education, and (vii) information communication technology (ICT). Apparently, the criteria for the selection of the schools as models had not been based entirely on schools' performance in improving student academic achievement, although the criteria regarding student academic achievement such as promotion to next grade level, pass rate at Grade 10 National Examination, and promotion rate to Grade 11 were included as criteria of performance. As evident in Ministry of education documents about the implementation of SIP and the standards (e.g., MoE, 2010c, 2011), all of these performance areas, except the last one, are blended to form the elements and standards in the four school improvement domains in SIP framework of Ethiopia.

SIP is a distinct approach to educational change which deals with raising student achievement through focusing on the teaching and learning processes and the conditions that support it, as well as on strategies for improving school's capacity to manage change (Chapman & Sammons, 2013; Hopkins, 2001, 2005). In the same vein, SIP in Ethiopia has

the aim of making incremental improvement in student learning outcome through improving schooling conditions that are referred to as improvement domains in the SIP framework (e.g., MoE, 2010; 2011).

School improvement scholars (e.g., Harris, 2002; Hopkins, 2005; Stoll, 1999, 2009) contend that schools require capacity for sustainable improvement. The basic definition of capacity involves the ability of individuals, groups, an organization, or a society to successfully perform tasks, to adapt, to achieve purposes, or goals (ADC, 2011; OECD, 2006). ADC (2011) and OECD (2006) explain that the notion of capacity of an organization goes beyond basic input resources or hard capacities (e.g. infrastructure, technologies, financial resources and personnel) to include operational capacities (values, competencies and abilities to cope with upcoming tasks, to define goals, to regulate relations, and to solve problems) as well as adaptive capacities (competencies and abilities required to learn from experiences and to adjust to changes). For Stoll, Bolam, McMahon, Wallace, and Thomas (2006:221) capacity of an organization is a complex blend of motivation, skill, positive learning, organizational conditions, culture, and infrastructure of support.

In their article, Hallinger and Heck (2010) define capacity of a school for sustainable improvement as “school conditions that support teaching and learning, enable the professional learning of the staff, and provide a means for implementing strategic actions aimed at continuous school improvement” (p. 97). On the other hand, school improvement scholars (e.g., Hallinger & Heck, 2010; Harris, 2002; Harris & Lambert, 2003; Harris & Muijs, 2005) emphasize leadership as the key aspect of school capacity for sustainable improvement. In their article, Hallinger and Heck (2010) expound that leadership and school improvement capacity operate as part of a set of systemic relationships; focusing on one without attending to the others is unlikely to bring about sustained improvement (p. 107). Indeed, other scholars (e.g., Chapman & Sammons, 2013; Hopkins, 2001; McIntyre, 2011)

emphasize the importance of school's capacity for self-evaluation, preparing school improvement plan, and monitoring the implementation of the improvement plan.

As apparent from the foregoing discussion, school capacity for sustainable improvement involves not only the built-in initial capacities in the form of physical input resources (hard capacities) and enabling institutional arrangements but also the development of operational as well as adaptive capacities in the process of the engagement of schools in school improvement program. Without the development of such capacities schools cannot sustain improvement (Harris, 2002; Hopkins, 2001; Stoll, 1999).

The purpose of this study was therefore to assess how well model secondary schools in implementing SIP in Oromia Regional State have developed (built) capacity for sustainable improvement so that they can sustain (continue) the improvements and improvement efforts they embarked on. At the same time, the study had the purpose of exploring the challenges facing the schools for sustainable improvement.

1.2. Overview of the Context of the Study Area

The Federal Democratic Republic of Ethiopia (FDRE) is a three-tier federal system comprising of the Federal Government, nine National Regional States, and two Chartered City Administrations (FDRE, 1995). Oromia National Regional State is of the largest size and populous of the nine Regional States of the FDRE. It extends from the southern Ethiopia-Kenya borderline in the south and runs to the north, east and west, comprising of the largest part of the central area of FDRE (OBoFED: 2009).



Figure 1.1: Map of Oromia Regional State

Along its total boundary length of 5700 km, it shares boundaries with all of the Regional States of Ethiopia, except Tigray Regional State. The total area of Oromia Regional State is 363, 399.8 km², accounting for more than 34.5% of the total area of the country and hosting 36.8% of the total population of the country (OBoFED, 2009). Administratively, the region is divided into 19 administrative zones and more than 300 woredas/districts. The overwhelming majority of the population is living in rural area (OBoFED, 2009).

As Ministry of Education annual statistical abstract 2014/15 (MoE, 2014/15) reveals, Oromia Regional State is comprised of the largest number, 1,100 (38.87%), of public secondary schools (Grades 9-12) of the country, followed by Amhara Regional State, which is comprised of 409 (14.45%) of public secondary schools of the country.

In the current time (in the year 2014/15), secondary school GER of Oromia National Regional State (Grades 9-10) was 34.1%, which was closer to the national GER (39.8%), and less than the Regional State of Tigray (65.9%), and Amhara (43.2%). On the other hand, the NER was 16.5%, which was less than the national average (20.6%) and that of the Regional State of Tigray (48.2%), and Amhara, which was 19.7% (MoE, 2014/15). GER of secondary school (Grades 9-10) in Oromia Regional State had been in a decreasing tendency in the last

five years from 38.4 in 2010/11 to 36.1 in 2011/12, to 36.4 in 2012/13, to 34.2 in 2013/14, and to 31.1 in 2014/15 (MoE, 2013/14; MoE, 2014/15).

Nevertheless, in spite of appreciable achievement in ensuring access to education, apparent gaps with regard to the quality and internal efficiency of education were indeed the prevailing problems in Oromia Regional State as for the country too (MoE, 2013/14, 2014/15; OEB, 2014).

1.3. Statement of the Problem

The adoption and implementation of SIP indicates the commitment of the Government of Ethiopia to improve the quality of general education. To date, improving the quality of education is the focus of the 1994 new Education and Training Policy of Ethiopia. It is also the focus of the country's first Growth and Transformation Plan (GTP I) 2010/11 - 2014/15 as well as the second Growth and Transformation Plan (GTP II) 2015/16 - 2019/20. Indeed, improving the quality of general education is the focal issue of concern in ESDP IV and ESDP V of Ethiopia. In ESDP V, the Government expressed its pledge of improving the quality of general education with a more emphasis than ever. It remarks that improving the quality of general education is the "first priority" to access, equity, and internal efficiency during ESDP V.

It is believed that ensuring school capacity for sustainable school improvement is critical to address the challenges of education quality in Ethiopia as well as in Oromia Regional State. ESDP IV (MoE, 2010a) and ESDP V (MoE, 2015) emphasize the need to build capacity to enable schools experience sustained improvement. ESDP IV emphasizes capacity building in the area of strategic planning, leadership, and financial management so that "school grant program" will be started as an integral component of GEQIP under ESDP IV. Similarly, ESDP V stresses capacity building in the area of strategic planning, school

management and leadership, as well as in school management information system for evidence-based decision making and resource allocation.

Scholars in the field of school improvement contend that initial urgency for improvement may be stimulated by mandating improvement strategies, but quick fix solutions rarely lead to sustainable school improvement and change (Stoll, 1999). Hopkins (2001:161) remarks “without a clear focus on ‘capacity’, then a school will be unable to sustain continuous improvement efforts that result in student achievement.”

Sustainable school improvement requires resources and the development of knowledge, skills and competencies of the actors for managing change and the new ways of doing things in the school improvement program (e.g., Harris, 2002; Hopkins, 2000). It also requires the development of leadership capacity (e.g., Hallinger & Heck, 2010; Harris & Lambert, 2003) as well as the development of collaboration and learning among staff and to harness this organizational learning to enhance the learning of students (e.g., Harris, 2002; Hord, 1997; Stoll et al., 2006). Furthermore, it requires the development of capacity (knowledge and skill) for school improvement planning, school, self-evaluation, and reflection to improve practice and/or for learning from practice (e.g., Chapman & Sammons, 2013; Hopkins, 2001; McIntyre, 2011).

Without the development of such capacities, schools cannot sustain improvement (Harris, 2002; Hopkins, 2001; Stoll, 1999). Thus, as strategy to improve education quality, the success of school improvement program in Oromia Regional State depends how well these model schools have developed capacity that guarantees sustainable improvement and do not revert to the state of inactive and ineffectiveness. The falling back of these schools has serious adverse effects. In the first place, it affects the schools themselves because resilience to improvement may not be easy after failure. Second, it erodes the local community’s confidence on the schools, then decreasing the community’s participation and support to the

current and subsequent school improvement efforts or reforms. Third, it dampens the morale and commitment of other schools of the region that are striving to appear as model school through better performance. Fourth and the worst, it might create skeptic view about the success of SIP in the region as strategy to improve the quality of education.

There was a paucity of research regarding school capacity for sustainable improvement in Oromia Regional State. In particular, there was no capacity assessment study on schools at different levels of SIP implementation. The national level assessment by USAID/IQPEP (2012) on the impact of the implementation of SIP as well as capacity development gap analysis of the impact of GEQIP by Ministry of Education (MoE, 2010b) was relied on aggregate data collected from all regions during the first phase of SIP implementation. They did not provide a clearly delineated regional level capacity gaps and was not tailored for schools at different performance levels in the implementation of SIP.

A dissertation by Hussien (2013) was focused on the implementation of SIP in Oromia Regional State. The major purpose of the study was to analyze the implementation of SIP and its impact in terms of the progress made in student academic achievement. Only as subsidiary to this major purpose that this study had treated challenges in the implementation of SIP (coined as capacity, conditions) broadly at three levels – regional, woreda (district), and school level. It lacks thorough emphasis to assessing capacity at school level, which is in fact the most important place to improve student learning and learning outcome.

Above all, Hussien's study was during the first phase of SIP implementation when schools with different performance levels of SIP implementation were not sufficiently emerged. Apparently, the second phase (continuity or sustainability phase) of the implementation of SIP is different from the first phase (i.e., the implementation phase). First, it is started with the recognition of the problems during the first phase of SIP implementation and the commitment to overcome the problems. In this regard, the preparation of a revised

framework for the implementation of SIP is worth mentioning. Second, during this period, exemplary (model) schools in their implementation of SIP are sufficiently emerged to share experiences to others at regional and local levels.

School improvement approach conceptualizes schools as adaptive organizations, where schools are expected to improve their performance through developing/building capacity to manage change (Hopkins, Harris, Stoll, & Mackay, 2010; Thoonen, Slegers, Oort & Peetsma, 2012). In this study, therefore, school capacity for sustainable improvement was viewed mainly as a developmental process that the schools develop/built in the trajectory of the process of the implementation of school improvement program. Capacity development is a change process whereby individuals, groups, and the organization as a whole unleash, strengthen, create, adapt and maintain capacity over time (ADC, 2011; Caprio, 2008; OECD, 2006; UNDP, 2009). This means that there are aspects of school capacity that are expected to be developed as schools have embarked on successful school improvement process (e.g., Fullan 2007; Harris, 2002; Hopkins, 2001; Mitchell & Sackney, 2009). Among others, such capacity aspects include the development of collaborative work culture, collegial learning culture, shared leadership and the development of a sense of collective responsibility of staff to improve student learning and learning outcome (Hall & Simeral, 2008; Harris, 2002; Little, 2007; Mitchell & Sackney, 2009). Besides, the development of capacity for evidence-based school improvement planning through authentic school-self evaluation, critical reflective dialogue has paramount importance (e.g., Harris, 2002; Hopkins, 2001; McIntyre, 2011).

To this effect, the Four School Improvement Domains (D1, D2, D3, & D4) in school improvement framework of Ethiopia are the key areas of organizational and institutional arrangements to enable schools to engage in strategies and activities for improving student learning and learning outcome, and for building capacity for sustainable improvement (see Figure 1.3 - the conceptual model of the study, p. 22).

In Domain one (D1), planning and leadership capacity are the key capacity dimensions that the schools need to develop. As explained in GEQIP document (MoE, 2008), school capacity in planning and self-evaluation is believed to be essential for greater effectiveness, efficiency, accountability in performance, and improved teaching learning process. The typical evaluation cycle of review, planning and action is an essential part of successful improvement and change (Fullan, 2008; Harris, 2002; MoE, 2011). On the other hand, leadership capacity of school in the same domain involves the leadership of school principals and the shared leadership of teachers and students. Above all, school principals and deputy principals with the appropriate level of qualification and training to the position are at the heart of leadership capacity of school. School principal (the school head) is important capacity of school as well as a capacity builder. As capacity builder, effective school principal facilitates and maintains the development of professional learning community of school and encourages the shared leadership of teachers (Duignan & Cannon, 2011; Harris, 2002; Hord, 1997).

Capacity building strategies embedded in the second Domain (D2) include teachers' competence, motivation and commitment to learning through school-based professional development frameworks such as collaborative instructional planning, group evaluation and reflection on practices, professional dialogue, experience sharing, action research, mentoring and other similar activities that help to get new knowledge and skill to apply in the classroom to improve student learning and learning outcome (MoE, 2009, 2010c, 2011). Professional Learning Community (PLC) is the umbrella term for staff with such characteristics.

Several authorities (e.g., Glickman, Gordon, & Ross-Gordon, 2007; Hall & Simeral, 2008; McLaughlin & Talbert, 2006; Mooney & Mausbach, 2008; Stoll & Louis, 2007; Wald & Casteleberry, 2000) argue that the most promising strategy for sustained, substantive

school improvement is developing the ability of school personnel to function as professional learning communities. Hall and Simeral (2008:18) emphatically describe that it is difficult to imagine meaningful school reform and significant positive change in a school that does not count the PLC concept among its structural assets. In this regard, the revised implementation guideline of SIP (MoE, 2011: 70-74) emphasizes the need for active involvement and collaboration of teachers in school improvement, making professional dialogue and reflection on their practices to realize school improvement goals. It explains in detail school organizational arrangements and responsibilities that characterize the staff as an entity of collaborative professional learning community.

The third Domain of school improvement (D3) emphasizes the need to involve parents and the community in school management and improvement affairs. Increased participation of parents and the community is an essential school capacity dimension emphasized in SIP framework of Ethiopia to resolve the constraint in financial resource capacity of schools (MoE, 2006b, 2011; MoE, 2008). To this effect, the engagement and commitment of Parent Teacher Associations (PTAs) to properly execute their duties of bridging the school and the community would serve as an important leverage for the schools to ensure sustainable improvement.

On the other hand, the fourth Domain (D4), it is evident from the implementation guideline of SIP (MoE, 2011) and the standards (MoE, 2010c) student empowerment as well as student engagement (referred to as support systems and learning in SIP document) are important aspects of school capacity for sustainable improvement. Among other aspects in this domain, MoE (2011) remarks that the learning effort (motivation) and disciplined behavior of students as the very critical aspects of school improvement in order to improve student learning and learning outcome.

Student empowerment is an important capacity of a school because academically empowered students would take responsibility for control of misbehaviors and to take responsibility for their own learning; they are cooperative and develop the ability, confidence, and motivation to succeed academically (Harris, 2002; Sergiovanni, 2001). On the other hand, school capacity of ensuring student engagement with their school life is very essential factor for improving retention and the academic achievement of students (Leithwood & Jantzi, 1999a; Silins & Mulford, 2007). Three forms of student engagement are important predictors of student achievement and retention (Leithwood & Jantzi, 1999a, 2000; Silins & Mulford, 2007; Willms, 2003).

However, basic input resources are the foundation for the functioning and development of the aforementioned capacity dimensions of school. For instance, the ability of a school to ensure student engagement depends on its human and financial resources capacity to make the school compound conducive to effective teaching learning process.

Therefore, the purpose of this study was to assess how well model secondary schools in implementing SIP in Oromia regional state have developed the capacity dimensions expounded above. In line with this major purpose, the study had a subsidiary purpose of exploring the major challenges facing the schools for sustainable improvement and to suggest viable solutions to overcome the challenges.

1.4. Basic Research Questions

In line with the purpose of the study and the various dimensions of school capacity for sustainable improvement explained above, the study attempted to answer the following basic questions.

1. What is the capacity (knowledge and skill) of the schools in preparing evidence-based, specific, and measurable school improvement plan?

2. How well do the academic staff of the schools perform with a sense of professional learning community?
3. What is the leadership capacity of the schools?
4. What is the extent of the:
 - a. Empowerment and engagement of students?
 - b. Engagement of parents/community?
5. What is the resource capacity of the schools (personnel, financial, physical infrastructures and materials) to ensure sustainable improvement?
6. What are the major challenges of the schools for sustainable improvement?

Leadership capacity of schools was assessed in terms of three aspects. These are (i) the school principals' leadership performance in relation to four sets of successful leadership repertoires/practices for sustainable school improvement (setting direction, developing people, re-designing the organization, and managing the teaching learning program; (ii) the practice of shared leadership, and (iii) the qualification (training) of school principals for the position.

Whereas, staff performance with a sense professional learning community was assessed in terms of five attributes: shared vision and values, collaborative work culture/practice, collective/collaborative learning practice, shared personal practice, and supportive conditions. On the other hand, three forms of student engagement (behavioral engagement, academic engagement and affective/identification engagement) were included in this study. As mentioned earlier, these three forms of student engagement are important predictors of student achievement and retention (Leithwood & Jantzi, 1999a, 2000; Silins & Mulford, 2007; Willms, 2003).

1.5. Objectives of the Study

The general objective of the study was examining the capacity of model secondary schools of Oromia National Regional State for sustainable improvement. In line with this general objective, the research had the following specific objectives.

- i. To examine the capacity of the schools for preparing evidence-based, specific and measurable school improvement plan.
- ii. To assess whether or not the schools under study developed culture of collaboration and de-privatization of practice that portray a sense of professional learning community of staff.
- iii. To examine the leadership capacity of schools for sustainable improvement. In particular, to assess the school principals were trained and qualified to the position, the performance of the school principals (the school heads) in terms of the four leadership practices of successful school principals, and to assess the shared leadership practice of teachers.
- iv. To assess the empowerment and engagement of students, and the engagement of parent/community are to the extent that provide leverage for sustainable school improvement.
- v. To explore the major challenges facing the schools to ensure sustainable improvement.

1.6. Significance of the Study

ESDP IV (MoE, 2010a) and ESDP V (MoE, 2015) of Ethiopia emphasize the need to build capacity to enable schools experience sustained improvement. More importantly, GEQIP II (World Bank, 2013) emphasizes school capacity building and the importance of continuous monitoring, assessing and evaluating the impact of GEQIP on student learning and achievement. As pointed out at the outset, SIP and GEQIP have a systematical nested

relationship. From this stance, this study was to assess the capacity of schools for sustainable improvement and to identify challenges facing the schools for sustainable improvement. Thus, this study was believed to have several significant contributions.

First, based on the finding, the study suggests viable solutions to capacity gaps and challenges facing the schools for sustainable improvement. Second, the study provides policy and decision makers, especially those decision makers in Oromia National Regional State with an insight into the challenges that the schools faced for sustainable improvement. Besides, it provides insights into key areas of concern for developing (building) the capacity of schools for sustainable improvement. Third, the study provides important insight to those who want to conduct research with regard to capacity for sustainable school improvement.

1.7. Delimitations of the Study

This study was delimited to Oromia Regional State in order to make the study focused and amenable to the context of one Regional State. To make the study of a manageable size and concomitant with the financial capacity of the practitioner researcher, it was delimited to eight model schools out of twelve such schools in the region.

In a large-scale, nationwide school improvement framework such as the case in Ethiopia, recent perspectives of school improvement (e.g., Fullan, 2006; Hopkins et al., 2010; Stoll, 1999, 2009) conceive school capacity from wider perspective to sufficiently capture the complexity, the interconnectedness and the different facets of change and school improvement processes. However, the main focus of this study was on capacity at school level. It is believed that school with strong internal capacity is potentially adaptive and overcome the negative influences of its external environment (Harris et al., 2003).

Nevertheless, because of the inextricable nature of the link between school capacity and its immediate local environment, the study had also given attention to some important aspects of the local environment for building school capacity; for instance, support from district

education office and school-parental-community partnerships. It also gave attention to the national and regional level institutional and organizational issues that the participants raised during interview as a challenge/s for sustainable school improvement.

1.8. Limitations of the Study

There is a paucity of proven model/framework for assessing school capacity for sustainable improvement. Thus, it becomes necessary for the practicing researcher to use self-developed school capacity assessing model, which was developed based on SIP framework of the country (the domains, the standards) and the literature. This might have its own drawback for it may be an over simplified conceptualization of the complex variables comprising of school capacity and their interactions as school capacity and/or capacity builder.

1.9. Organization of the Study

The study is organized into five Chapters. Chapter one treats the introduction, which include the background of the study, statement of the problem, the basic research questions, objectives and significance of the study, conceptual framework of the study and operational definitions of key terms. Chapter two presents the review of literature. Chapter three deals with the research design and methodology, and Chapter four treats the presentation, analysis and interpretation of data. Finally, Chapter five presents summary of the major findings, the conclusions, recommendations and implications of the finding for theory and research.

1.10. Conceptual Framework of the Study

1.10.1 Conceptual Theory

School improvement paradigm marks an important move towards understanding schools as open organizational systems operating in an environment. It believes in schools' ability (as an organization) for self-developing and self-renewing in response to environmental changes and requirements, including standard based accountability pressure for continuous school improvement (Scheerens, 2000: 108). To this end, the practicing researcher believed that,

among other theories of organizational development and change, Senge's (1990) theory of Learning Organization can serve as the conceptual theory of this study.

Influenced by Senge's (1990) theory, scholars in the field of school improvement have recently began taking the perspective of learning organization and view schools as dynamic learning systems. This is evident from the basic assumptions on which the school improvement paradigm is rested. As pointed out by Barth (1990, cited in Hopkins, 2005: 3) these assumptions are (i) schools have the capacity to improve themselves, if the conditions are right; a major responsibility of those outside the school is to help provide these conditions for those inside; (ii) when the need and purpose is there, when the conditions are right, adults and students alike can learn and each energizes and contributes to the learning of the other; (iii) what needs to be improved about schools is their culture, the quality of interpersonal relationships, and the nature and quality of learning experiences; (iv) school improvement is an effort to determine and provide, from without and within, conditions under which the adults and youngsters who inhabit schools will promote and sustain learning among themselves.

Senge's (1990) theory holds the view that schools have the capacity to transform themselves into supportive environments for learning and change. Senge's (1990) approach is noticeably different from much of the other works on organizational change theory in that it looks at the longer-term issues of sustaining and renewing organization, and it examines the challenges of organizational change in terms of first initiating, second sustaining and third redesigning and rethinking change (Cameron & Green, 2009: 129).

The metaphor of Professional Learning Community (PLC) is often applied in school improvement literature to refer to Learning Organization or Learning School (e.g., Harris, 2002; Mitchell & Sackney, 2003; Hopkins, 2001; Williams, Brien, & LeBlank, 2012).

Essentially, school improvement is concerned with building professional learning communities. This means engaging teachers in a process of enquiry and reflection, in working with colleagues to problem-solve collectively and in working together as a learning organisation. In terms of organisational theory, if the school is a living system, it should seek to learn from within in order to develop and grow (Harris, 2002: 113).

Like Senge’s (1990) theory, the perspective of PLC relies on open system theory of organization and links the structural, cultural, and political dimensions of workplace environment to professional learning. To this connection, Harris (2002:117) remarks that .learning within an organization is optimal in an environment of shared leadership and shared power. Fostering such an environment requires team work, collaboration and a commitment to enquiry.

1.10.2. Conceptual Model

Based on school improvement Framework of Ethiopia and the literature, six dimensions of school capacity depicted in Figure 1.2 below were used for assessing the capacity of the schools for sustainable improvement.

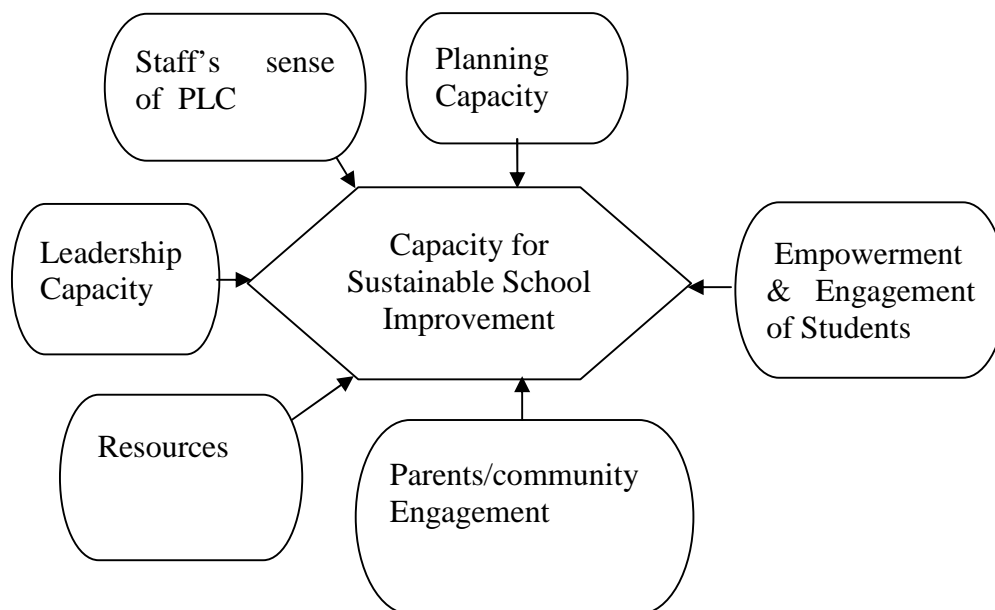


Figure 1.2: Dimensions of School Capacity for Sustainable School Improvement.

Accordingly, Figure 1.3 below represents the conceptual model of the study. It provides the various school capacity dimensions embedded in the school improvement domains and the interactions among these capacity dimensions as “a capacity and capacity building elements” for sustainable school improvement. Feedback data from school self-evaluation (SSE) and external quality assurance inspection (QAI) of District/Woreda Education office provide the school with important information for cyclic process of school development/improvement planning. Dashed arrows in the figure indicate the feedback data from school self-evaluation and quality assurance inspection of local education authority.

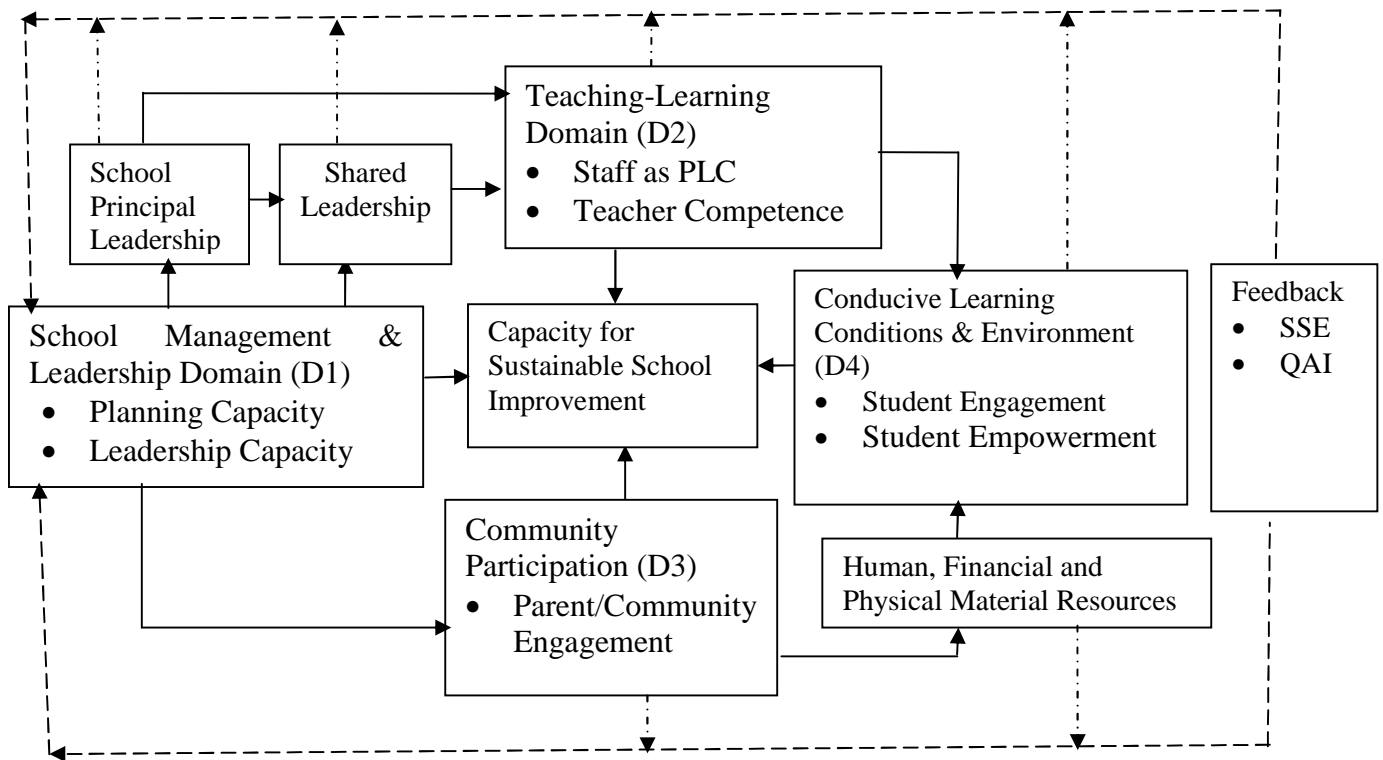


Figure 1.3: Conceptual Model of the Study.

Figure 1.3 connotes that school principal (the head of school) plays pivotal role in fostering shared leadership; in building collaborative culture and professional learning community of teachers; in enabling teacher social construction of meaning, shared norms and values (Leithwood, et al, 2010; Harris & Muijs, 2005). Empirical studies show that (e.g., Day et al., 2011; Leithwood & Jantzi, 2006; Leithwood, Harris & Hopkins, 2008) successful school principals ensure sustainable school improvement by relying on four leadership

practices, or repertoires (setting directions, developing people, re-designing the organization, and managing the teaching and learning program). These leadership practices contribute to the learning and learning outcome of students indirectly and most powerfully through leader's influence on staff, such as through building and facilitating shared values and vision, shared leadership, collaborative work culture, and the learning of teachers through various school-based collaborative learning frameworks. Professional learning community (PLC) is the umbrella term encompassing all of these attributes of staff of a school.

By adapting to school improvement framework of Ethiopia, five attributes (or organizational arrangements) for the development of school-based professional learning community of teachers were included to assess how the academic staff in schools understudy performs collaboratively with a sense of PLC of school. These are shared vision and values, collaborative culture, collaborative/collective/ learning, shared personal practice, and supportive social and structural conditions, including school-based CPD, and shared leadership.

In this study, constructs labeled as student empowerment and student engagement were employed to encapsulate school level and classroom level conditions affecting student learning and learning outcome. Student empowerment was conceptualized as social processes that help students gain power or capacity to get control over their own learning and behavior. It is the development of knowledge, skills and abilities in the learner to enable them control their own learning (Harvey, 2004-13). On the other hand, by adapting to SIP framework and the standards in Ethiopia three components of student engagement were considered (behavioral, academic, and affective/identification engagement). The behavioral engagement comprises student participation in extracurricular activities and the existence of positive social relationships among students. The academic engagement refers to the active involvement of students in classroom teaching learning process, their motivation and

commitment to master curriculum content. At classroom level two classroom factors were supposed to affect student academic engagement: (i) teacher related factors (use of active teaching-learning strategies, professional knowledge and skill, relationships with students, and high expectation), and (ii) physical facilities affecting classroom teaching learning process.

1.11. Operational Definitions of Key Terms

Capacity: In this study, capacity is conceptualized as the ability of an organization to manage its affairs and to carry out its duties in a creative and adaptive manner to its context in order to successfully achieve the mission, vision and goals of the organization. In specific terms, it includes (i) adequate basic input resources (e.g. infrastructure, material resources, financial resources, competent and committed staff/personnel, technologies); (ii) leadership and strategic management capabilities such as the abilities to cope with upcoming tasks, to define goals, to regulate relations, and to solve problems); (iii) adaptive capacities such as collaborative work culture, ability to learn from experience and to adjust to changes; and (iv) enabling organizational and institutional conditions (arrangements) for action.

Capacity for Sustainable School Improvement: In this study, capacity for sustainable school improvement refers to the ability of the schools to manage school improvement process and achieve the improvement goals, including student learning and learning outcome; and is a measure of school's capacity (knowledge and skill) in preparing evidence-based school improvement plan, the leadership capacity of school, the performance of academic staff with a sense of Professional Learning Community (PLC), the empowerment and engagement of students, the engagement of parents and the community at large; and the availability, the adequacy, and quality of resources (human, financial, and physical resources) for effective school improvement.

Engagement of Community/Parents: Refers to the extent to which the parents and the community at large actively participate in school improvement affairs directly and through Parent Teacher Association (PTA) who are fully devoted to work for the improvement of school. It also includes the extent to which schools welcome parents (including PTA) so that open and positive relationship exists between the school, parents and the community at large.

Evidence-Based Planning: Refers to school improvement planning in which priority goals, objectives and/or targets of school improvement were set on the basis of data/evidences obtained from authentic school self-evaluation against school improvement domains, elements, and standards in SIP framework of Ethiopia.

Leadership Capacity: Broad-based leadership of school with skillful involvement of the partitas. This includes the leadership practice of the school principal with the appropriate level of leadership training to the position, deputy school principals with appropriate leadership training to the position, and the shared leadership of teachers who assumed formal leadership roles (for instance, as a leader or a member of senior teacher leadership team, as department head, as program coordinator, or as committee head).

Leadership Practice: Refers to the four broad dimensions of the leadership repertoires/practices of successful school principals, which are important for building the capacity of a school as well as the motivation and commitment of the staff, parents, students, and the larger community towards ensuring sustainable school improvement. These are setting direction, developing people, managing the teaching learning program (especially the instructional program), and re-designing school organization, which includes fostering structures for shared leadership, building collaborative work culture, climate of trust, a culture of collaborative/collective learning, and the improvement-oriented mindset of the staff.

Professional Learning Community: Refers to the academic staff of school striving to perform at its ultimate potential for the collective responsibility of improving student learning and learning outcome through working together and is characterized by shared vision and values, collaboration as opposed to privatized personal practice, collaborative/collective learning, reflective inquiry and dialogue on how to improve school, student learning, and learning outcome.

School Improvement: A systematic approach to school development and change with a pivotal aim of improving student learning and learning outcome through continuous process of school self-evaluation, and planned improvements and changes in a school level and classroom level conditions and processes that are designated as the “Four School Improvement Domains” in the SIP framework of Ethiopia. School improvement is therefore a process (not an event) in which the school community and the stakeholders work diligently and persistently at achieving the standards in the four school improvement domains to improve student learning and learning outcomes, and to achieve other school improvement goals in the SIP framework.

School Leadership: The process of influencing (mobilizing, organizing, and directing) the school community to articulate shared vision, mission, core values and goals for school improvement and to achieve the shared vision, mission and goals being articulated. It is the role of the school principal as well as teachers who assumed the formal leadership roles and positions in the school.

Student Empowerment: In this study, student empowerment was used to refer to the extent to which students are actively involved in school management/leadership affairs relevant to them and the school developed them in terms of knowledge, skill and attitude so that they are able to take control of their own learning in group and individually, make self-control of

misbehavior in classroom and in school compound; and developed confidence, motivation and commitment to learning to become academically successful.

Student Engagement: In this study, student engagement refers to students' active involvement and enjoyment in classroom learning (academic engagement), involvement and participation in school co-curricular activities/clubs and the existence of positive social relationships (behavioral engagement), as well as their appreciation and identification with their school (affective/emotional/belongingness engagement).

Sustainability: In this study, sustainability refers to the "continuation" of school improvement program beyond implementation phase; i.e., beyond the initial use, or the first experiences of attempting to put the improvement/change program into practice. This definition was basically developed from Fullan's (2007) explanation of the concept of sustainability in his book, *The New Meaning of Educational Change* (pp. 65-66). In this *New Meaning of Educational Change*, Fullan remarks that the term "continuation" or "institutionalization" of a change is applied simply to refers to the change program is built-in as an ongoing part of the program after implementation phase or an initial use of the program (usually the first 2 or 3 years of use). In other words, it refers to incorporation, embedding, routinization, or institutionalization of change program as an ongoing part of the program.

Sustainable School Improvement: It refers to the continuation and embedding of school improvement practices and the resulting improvements and changes (whether big or small) in the school level and classroom level conditions (called school improvement domains in the SIP framework of Ethiopia) as well as in student learning and learning outcome.

CHAPTER TWO

REVIEW OF RELETED LITERATURE

This chapter presents the review of related literature to provide the conceptual and theoretical framework of the study. First, it treats an overview of the evolution of school improvement paradigm, and the major tenets of school improvement. Second, it treats the review of capacity for sustainable school improvement. It starts with overview of perspectives on the “notion of capacity” for sustainable school improvement. Then, within the framework of the perspectives, it treats in detail six aspects of school capacity for sustainable improvement. These are (a) professional learning community (PLC) of school, (b) leadership capacity, (c) school-based continuous professional development (CPD) of teachers, (d) school culture, (e) the empowerment and engagement of students, parents and the community, and (f) planning capacity of school. Thirdly, the chapter presents a brief overview of school improvement program in Ethiopia.

2.1. The Evolution of School Improvement Paradigm

The evolution of school improvement paradigm has roots in two research movements school effects research movement and effective school research movement.

Effective school research movement was emerged in reaction against the findings of the input-output production function model of “school effects research,” which had been the approach of studying school effects from mid-1960s to mid-1970s (Mace-Mutluck, 1987; Reddy, 2007). To date, Coleman et al. (1966), Jenks et al. (1972) and other influential researchers employing input-output model in studying the effect of school input resources on student achievement had come to conclude that variation in school input resources do not matter much in affecting student achievement and ensuring equity of education achievement among children from different socio-economic backgrounds (Brooke-Smith, 2003; Teddlie & Stringfield, 2007). As a result, the prevailing view in the late 1960s and early 1970s was that

school effect on student achievement does not matter much as compared to the effect of family background (Brooke-Smith, 2003; Mace-Matluck, 1987; Sammons, Hillman, & Mortimore 1995; Teddlie & Stringfield, 2007).

Thus, effective school research is a paradigm that was emerged against the prevailing belief of the time that “school does not matter” to affect student outcome (Brooke-Smith, 2003; Scheerens, 2000; Teddlie & Stringfield, 2007). Effective school research paradigm argued that standard production function (input-output) approach had ignored the important aspect of school the processes of teaching and learning (Scheerens, 2000; Teddlie & Stringfield, 2007). That is, effective school paradigm was emerged on the assumption that the neglect of “school process” in school effect studies employing the input-output production-function model could possibly explain the ambiguous result of the model (EFA, 2005; Reddy, 2007).

As a result, the central focus of effective school research (input-process-output model) is the idea that “school matters,” that schools have major effects upon child’s development and that, to put it simply, schools do make a difference (Sammons, Hillman, & Mortimore, 1995; Teddlie & Stringfield, 2007). In effect, as opposed to Coleman et al. (1966) and Jencks et al (1972), the vast bodies of effective school research movements in USA and UK in early 1980s come to conclude that schools matter significantly to affect student learning outcome (Brooke-Smith, 2003; Glickman et al., 2007; Mace-Matluck, 1987; Scheerens, 2000). Expressed explicitly, effective school researchers affirmed that (a) all children can learn and schools control enough of the factors necessary to learn the core curriculum; and (b) schools should be held accountable for student achievement.

In late 1980s, effective school research movements had further made clear that different patterns of school organization and teacher behaviors had different effects on student learning outcomes (Scheerens, 2000; Teddlie & Stringfield, 2007). Relying on more sophisticated

research designs and new statistical methods (Brooke-Smith, 2003; Glickman et al., 2007), effective school research movements were found seven attributes (correlates) of effective school: (i) strong leadership from the principal, (ii) clear and focused mission, (iii) safe and orderly environment, (iv) climate of high expectations, (v) frequent monitoring of student progress, (vi) positive in-school relations, (vii) opportunity to learn and student time on task. Later, the correlates of effective schools were gradually extended to eleven.

As such, effective school researchers were focused on identifying in-school factors that characterize effective schools from ineffective schools. However, criticisms on the methodological, epistemological and theoretical orientations of effective school research paradigm began to emerge in early 1980s and gave rise to the emergence of school improvement paradigm (Brooke-Smith, 2003; Glickman et al., 2007; Leach, 2010). For instance, the criticism by Hill (1998, as quoted in Glickman et al., 2007) concerns with the weakness of effective school paradigm to address the issue of change, adaptation, and organizational development.

School effectiveness research has not found a satisfactory way of dealing with the fact that schools and school education are essentially about growth, progress and change. Researches have been reduced to taking the snapshots of phenomena, to focusing on achievement rather than rates of progress of students, and on measuring current status rather than charting change overtime (p. 40).

The other criticism involves the failure of effective school approach to conceptualize schools as organizational system of multiple levels in dynamic environment. School effectiveness work was criticized for it tends to neglect conditions outside the school at different layers that contribute to overall effectiveness of school. Reynolds, Hopkins, and Stoll (1993) state:

The school is embedded in an educational system that has to work collaboratively or symbiotically if the highest degrees of quality are to be achieved. This means that the roles of teachers, heads, governors, parents, support people (advisers, higher education consultants etc.), and local authorities should be defined, harnessed and committed to the process of school improvement (p. 9).

Furthermore, Reddy (2007) describes several limitations of effective school approach. Firstly, school effectiveness reflects a view of schools at a point in time. It does not view them as dynamic and changing organizations. Secondly, it has limited practical application of effective school research for school development and improvement, since it has concerned only on identifying the factors that work in effective schools (P.33). School effectiveness studies offer a “snapshot” of school rather than a moving picture; given the dynamic and evolving nature of schools as organizations, this snapshot approach has limited usefulness for informing school improvement (Brooke-Smith, 2003; Glickman et al., 2007).

Thus, school improvement field was emerged as an approach to explain strategies for change in education (Leach, 2010). It marked an important move towards understanding schools as organizational systems operating in an environment (Brooke-Smith, 2003:38). In short, the conceptual and methodological weaknesses of effective school research have led to the widely accepted notion of school improvement as a strategy for achieving positive educational change that focuses on student achievement by modifying classroom practices while simultaneously adapting the management arrangements within the school to support teaching and learning (Hopkins, 2001).

As strategic response to the challenges of educational change, the measure impetus to the development of school improvement paradigm dates back to OECD Sponsored International School Improvement Project (ISIP) between 1982 and 1986 in 14 OECD countries (Harris et al., 2003; Reddy 2007; Reynolds, Hopkins, & Stoll, 1993). School

improvement was defined in ISIP as “a systematic, sustained effort at change in learning conditions and other related internal conditions in one or more schools, with the ultimate aim of accomplishing educational goals more effectively (Van Veltzen et al., 1995, as quoted in Brook-Smith 2003:39).

Taking school as the centre of change, the ISIP project embodied the long-term goal of moving schools towards the position of self-renewal and growth. This *organic* approach to school improvement highlighted the importance of taking a multi-level perspective on school development and change (Harris, 2002: 24). There are four basic assumptions of school improvement paradigm, as opposed to the list makers (i.e., effective school research). These assumptions are: (i) schools have the capacity to improve themselves, if the *conditions* are right. A major responsibility of those outside the school is to help provide these conditions for those inside; (ii) when the need and purpose is there, when the conditions are right, adults and students alike can learn and each energizes and contributes to the learning of the other; (iii) what needs to be improved about schools is their *culture*, the quality of interpersonal relationships, and the nature and quality of learning experiences; (iv) school improvement is an effort to determine and provide, from without and within, conditions under which the adults and youngsters who inhabit schools will promote and sustain learning among themselves.

Overall, the pinnacle of effective school paradigm was producing a list of in-school factors that characterize effective schools from ineffective ones, without giving a concern to how to transform the “ineffective” schools to “effective” schools. Thus, school improvement paradigm was emerged as an approach that explains strategies for improving schools. It marks an important move towards understanding schools as open organizational systems operating in an environment. It is an *organic* approach that embodies the principle of self-renewing and developing school.

Recently in the 1990s, school improvement paradigm has moved itself to a position that involves the accumulated experience and reflective knowledge of school effectiveness and school improvement.

To date, started in 1980s, school improvement practices and the empirical knowledge base for guiding school improvement approaches and strategies have passed through four phases and, currently, it is on the fifth phase which is often called large scale, national wide systematic reform (Harris & Chrispeels, 2006). In the 1980s, the emphasis was upon organizational change, school self-evaluation and the “ownership of change” by individual schools and teachers; but these initiatives had not strongly connected to student learning outcomes (Harris & Chrispeels, 2006).

As opposed to school improvement perspective in 1980s, the unique feature of the 1990s school improvement model (sometimes called effective school improvement model) is its explicit focus on “classroom conditions” that affect student learning (academic engagement) and learning outcome (Hopkins, 2001, 2005). These include, among others, *openness of relationships* in the classroom; the *pattern of expectations* set by the teachers and the school regarding student performance and behavior within the classroom; *teachers’ access* to a range of pertinent teaching materials; *teachers’ repertoire* of pedagogical skills, which is the range of teaching styles and models internalized; *teachers’ pedagogic partnerships*, which is the ability of teachers to form professional relationships within and outside the classroom that focus on improvement of practice; and *reflection on teaching*, which is the capacity of the individual teacher to reflect on his/her own practice and to put to the test of practice.

Programs such as *Improving Quality of Education for All* (IQEA) and *High Reliability Schools* (HRS) in England, the *Improving School Effectiveness Project* in Scotland, the *Manitoba School Improvement Project* in Canada and the *Dutch National School*

Improvement Project are examples of effective school improvement projects/programs in this third phase or the 1990s school improvement approach (Harris & Chrispeels, 2006; Leach, 2010; Reddy, 2007).

2.2. The Major Tenets of School Improvement Paradigm

As Reddy (2007:34) summarized from the review of literature of main researchers' studies on school improvement, the basic tenets of school improvement approach are (a) school improvement efforts embody principles of self-renewing school where change and development are owned by the school and not imposed from outside; (b) the key focus is to change the internal conditions of the school not only the teaching-learning process but also school procedures, role allocation and resources that support teaching learning. Hence, the real agenda is to change school culture ensuring "whole school development" and not just a single innovation; (c) concern with broader outcomes of schooling rather than being limited to achievement outcomes; and in this regard, the range of school improvement goals include those related to pupils, teachers and organization; (d) school improvement is unique to each school because each school's context is unique. Hence, each school would address the change process in different ways and no blueprint can be proposed for all schools; (e) school improvement paradigm is based on the practical knowledge of practitioners; (f) school improvement perspective emphasizes the notion of school self-evaluation and school based-reviews; (g) the change process in school improvement comprises three phases: initiation, implementation, and institutionalization; (h) multi-level perspective, i.e., although school is the center of change, it does not act alone. All elements of the educational system (teachers, parents, staff, local and state authorities) have to work collaboratively for the achievement of the highest quality of school improvement.

2.3. Capacity for Sustainable School Improvement

Under this topic, various sub-topics related to school capacity for sustainable improvement are treated. First, it presents perspectives on the notion of capacity and capacity building for sustainable school improvement. Second, within the framework of these perspectives, six aspects of capacity for sustainable school improvement are discussed in detail. These are (a) professional learning community (PLC) of school, (b) leadership capacity, (c) school-based continuous professional development (CPD) of teachers, (d) school culture, (e) the empowerment and engagement of students, parents and the community, and (f) planning capacity of school.

2.3.1. Perspectives on Capacity for Sustainable School Improvement

The notion of school capacity occurs in the writings of a range of theorists and practitioners involved in school improvement research over the past three decades; and it connotes the idea that without in-built capacity schools cannot manage change and sustain improvement. In this regard, the issue of what constitutes school capacity for sustainable improvement has been linked to a wide range of overarching constructs embodied in various perspectives.

To date, the importance of capacity for sustainable school improvement is evident in OECD sponsored International School Improvement Project (ISIP) between 1982 and 1986 (Brooke-Smith, 2003; Harris, et al, 2003). ISIP was predicated upon a multilevel school improvement strategies and a drive towards institutionalization of change through strengthening school capacity for problem solving, making the school more accommodating change, as well as enhancing the teaching-learning process (Hopkins, 2005; Leach, 2010). Similar to ISIP, the UK'S School improvement Project of Improving the Quality of Education for All (IQEA) is essentially about bottom-up approach with emphasis on internal

school capacity building and culture of quality enhancement in student achievement (Harris, 2002; Leach, 2010).

Both ISIP and IQEA school-improvement projects emphasize the importance of creating conditions within schools that can sustain the teaching-learning process and the learning outcome of students. Conditions are the internal features of the school the arrangements that enable to get work done (Hopkins, 2001, 2005). As such, the practices of improving schools in ISIP and IQEA projects suggest that internal capacity of school for change and development requires certain conditions at school and classroom level be in place to mutually support and sustain school improvement. These internal capabilities include teaching and learning, organizational norms, professional learning systems, knowledge transfer process, leadership arrangements, and its responsiveness to external learning (Harris et al., 2003: 86).

Initially conceived in ISIP and IQEA school improvement projects, the notion of school capacity for sustainable improvement had begun attracting the attention of scholars to provide systematic definition of the concept and what it embraces (e.g., Hargreaves, 2001; Harris, 2002; Harris & Lambert, 2003; Jackson, 2001; Mitchell & Sackney, 2009; Newmann, King & Young, 2000; Stoll, 1999, 2009).

Newman, King, and Young (in Hopkins, 2001) argue for teacher professional development to advance the organizational capacity of the school and they define internal capacity of a school as the collective competency of the school as an entity to bring about effective change and suggested four components of school capacity: (a) knowledge, skills and dispositions of staff members; (b) a professional learning community in which staff work collaboratively to set clear goals for student learning, assess student achievement, develop action plan to increase student achievement and engaged in enquiry and problem solving; (c) program coherence to what extent school's programs for students and staff learning are coordinated, focused on learning goals and sustained over a period of time; and (d) technical

resources high quality curriculum, technology, conducive work place, physical environment, etc.

Fullan (in Hopkins, 2001) conceptualizes internal capacity of school in terms of human capital resource (the knowledge, skills, and dispositions of professional staff), and two key organizational features; namely, professional learning communities and program coherence (integration, alignment, and co-ordinations of innovations into their programs).

From capital theory perspective, Hargreaves (2001) identifies three dimensions of school capacity that are essentially linked in causal chain relationships to provide leverage for effective performance of a school. These are *intellectual capital*, *social capital*, and *organizational capital*. Intellectual capital is defined as the sum of the knowledge and experience of the school's stakeholders that they could deploy to achieve the school's goals and grows by two important processes: the *creation* of new knowledge and the capacity to *transfer* knowledge between situations and people. Social capital places the focus on people and their relationships, trust, and the collaborative networking that is founded on trusting relationships. Hargreaves asserts that a school rich in social capital will nurture its intellectual capital. Organizational capital encompasses how a school might organize and mobilize its intellectual and social capital to bring about school effectiveness.

Jackson (in Harris et al., 2003) proposed a more extended framework for analyzing school capacity to implement and sustain improvement programs. This includes five elements: the foundation conditions (physical-input resources), the personal and interpersonal factors, organizational features, and external opportunities. Jackson contends that the synergies, the interconnections, the emotional and spiritual glue that arise from and surround these components are the heartland of school capacity.

On the other hand, several scholars advocate the special role of school leadership as capacity as well as for building capacity for sustainable school improvement (Hallinger &

Heck, 2010; Harris & Lambert, 2003; Stoll & Louis, 2007; West, Jackson, Harris, & Hopkins, 2000). A great deal of school improvement literature asserts that successful school improvement essentially involves the transformation of the attitudes, beliefs and values that operate within a school (e.g., Fink, 2005; Fullan, 1998; Hopkins, 2001; Krüger & Scheerens, 2012). The key assumption in the literature is that improvement strategies should result in changing school culture and that leadership has an important part to play in defining and shaping culture. The type of school culture that tends to support improvement is one which is collaborative, has collegial working relationships and a climate for change (Harris, 2002:12).

Recently scholars in the field of school improvement take the perspective of learning organization and view schools as dynamic learning systems where school seek to learn from within in order to develop and grow (e.g., Fullan, 1998; Mitchell & Sackney, 2009; Stoll, 2009). When the notion of learning organization is used to describe schools, it is commonly referred to as a professional learning community (Williams, Brien, & LeBlank, 2012). From this perspective, Stoll (1999) defines internal capacity of school as “the power to engage in and sustain continuous learning of teachers and the school itself for the purpose of enhancing student learning” (p.506) and contended that a school with internal capacity can take change of change because it is adaptive.

From the perspective of organizational learning, Mitchell and Sackney (2009: 32) view high capacity school in terms of building professional learning community to transform the school; and they define high capacity school in terms of seven broad characteristics: (a) evidence of high energy and enthusiasm across the school; (b) a reputation for high quality in teaching and learning; (c) a collaborative culture among the staff; (d) innovation, experimentation, and risk taking in pedagogy and curriculum; (e) reflective practices among the professional staff; (f) authentic community involvement; and (g) a record of improved student learning outcomes.

From the review of literature, Harris and Muijs (2005: 54) generalized that “the two key components” of school and school capacity-building model are the *Professional Learning Community* (the people, interpersonal and organizational arrangements working in developmental or learning synergy) and *school leadership capacity* as the route to generating the social cohesion and trust to make this happen.

In summary, it is apparent from the forgoing explanation that the notion of school capacity for sustainable improvement basically revolves around concepts such as professional learning community (PLC) of school; school-based continuous professional development of staff; school leadership; collaborative culture; the skills and dispositions of staff (human resources); program coherence (alignment); and physical-input resources. Accordingly, in this study, the review of literature regarding school capacity for sustainable improvement is presented in terms of six major topics: (a) professional learning community of school, (b) school leadership, (c) school-based continuous professional development, (d) school culture, (e) empowerment and engagement of students and parents/the community, and (f) planning capacity of school.

2.3.2. Professional Learning Community of School as School Capacity

2.3.2.1. The Notion of Professional Learning Community of School

Johnson (2009:18) defines PLC school as “a specific model of organizational development and learning for schools that has its ultimate aim at student learning.” Hall and Simeral (2008:17) define professional learning community as a collective of educators who always strive to perform at their ultimate potential, working together to learn, grow, and improve the professional practice of teaching in order to maximize student learning. Harris and Lambert (2003: 98) contend that schools need to build and nurture a sense of a professional learning community (PLC) in order to improve and sustain improvement.

At school level, the focus of PLC is on teachers and school principals to work together to generate better knowledge and understanding of the context in which they work. Investing in the school as a *learning community of professionals* offers the greatest opportunity to unlock capacities among teachers (Harris & Lambert 2003: 130). Nevertheless, the concept of PLC is currently extended to include a range of collaborative professional groups within and outside school, usually termed as professional learning communities (PLCs). It includes a range of repertoires need in what is currently advocated as a new professionalism in the teaching profession (Deal, 2009). PLCs provide a channel for teacher leadership, dialogue, reflection, action, and promising practices, and take such varied forms as school–university collaborations, faculty study groups, staff development, coaching and other collaborative strategies for change (Mullen, 2008:3).

Professional community is one where teachers participate in decision-making, have a shared sense of purpose, engage in collaborative work and accept joint responsibility for the outcomes of their work. (Harris, 2002:79). It was not significant that the word “learning” appears between ‘professional’ and ‘community’ until into 1990s (Stoll & Louis, 2007). Currently, the term learning appeared between the term “professional and community” to indicate the communities of professionals who collaborate to reinforce “learning through enquiry” apart from collaboration that solely reinforce “efficiency of task performance” (Stoll et al., 2006; Stoll & Louis, 2007).

In general, the term ‘professional learning community’ encapsulates (a) the notion of professional learning within a community context that is, a community of learners (especially, teachers, school principals); (b) collective/collaborative learning of staff as opposed to an individual learning of teachers for professional development and (c) mutually supportive relationships, shared norms and values (Stoll et al., 2006). It is a model of school

organizational development designed to foster collaboration and learning among school personnel and to harness this organizational learning to enhance the learning of all students.

2.3.2.2. Professional Learning Community of Staff as School Capacity

There is increasing consensus among scholars that PLC of school plays a key role in building individuals' and schools' capacities for sustainable improvement in a rapidly changing world. It is believed to be the most promising strategy for sustainable school improvement of school.

Several authorities (Glickman, et al., 2007; Hall & Simeral, 2008; McLaughlin & Talbert, 2006; Mooney & Mausbauch, 2008; Pultorak, 2010; Stoll & Louis, 2007; Wald & Casteleberry, 2000) argue that the most promising strategy for sustained, substantive school improvement is developing the ability of school personnel to function as professional learning communities. Hall and Simeral (2008:18) emphatically describe that it is difficult to imagine meaningful school reform and significant positive change in a school that does not count the PLC concept among its structural assets. A key purpose of PLC of school is to enhance teacher effectiveness as professionals, for students' ultimate benefit (Stoll et al., 2006: 229).

In schools organized as PLC, collaborative learning of staff through various collegial collaborative learning methods is a powerful strategy to build sustainable internal capacity of a school. This is because school PLC have the ability to build and manage knowledge to improve instruction, create shared commitments and standards for practice, and organize to sustain a culture of continual improvement, establish the teachers' knowledge base, professionalism, and ability to act on learning that are essential to improve teaching and learning (McLaughlin & Talbert, 2006:22).

The PLC approach encourages cohesion, common discussions, and interdependence. By all accounts, it allows every member of the school community to benefit from the expertise,

strengths, and experience of every other member (Hall & Simeral, 2008: 18). It serves interrelated functions that contribute uniquely to teachers' knowledge base, professionalism, and ability to act on what they learn.

In a focused professional community there is a strong and clear commitment to student achievement as evidenced by rigorous academic work, teachers' personal concern for student success, and the expectations that students will work hard (Segiovanni, 2001; Little, 2007). Effective teachers and effective schools take seriously the link between classroom practice and student learning outcomes (Harris, 2002). Focus on student learning and learning outcome, and collective responsibility for student learning and learning outcome are the underlying purpose of PLC of school (e.g., Fullan 2005, McLaughlin & Talbert, 2006: Sergiovanni, 2001; Stoll et. al., 2006).

2.3.2.3. Characteristics of Professional Learning Community of School

In the literature, five attributes of, or organizational arrangements for the development of effective PLC, are often cited in contemporary literature. These are (a) shared values and vision; (b) collaboration; (c) collective learning; (d) shared personal practice; and (e) supportive conditions (e.g., Harris & Muijs, 2005; Hord, 1997; Olivier & Huffman, 2008). The fifth dimension – supportive conditions – which is further sub-divided into “supportive conditions – relationships” and “supportive conditions – structures”. The review of each of these attributes of PLC of school is as follows.

Shared vision and values. Among PLC of school, there is a shared vision that serves as the community's road map to the future; a vision – connects dreams and aspirations, offers hope for a different future, and bonds the diverse members of the community and their perspectives (Wald & Catsleberry, 2000:). Such shared values and vision lead to binding norms of behavior that the staff supports. A professional learning community is one in which there is shared values and norms and these values and norms represent the fundamental

beliefs of those within the community and become the defining purpose of the school (Harris & Lambert 2003). Building shared vision and values of a school improvement among staff requires a process that the staff and other stakeholders had reached on a consensus about their values, and beliefs with regard to improving the school and developed a clear picture for what the school can become (Mooney & Mausbach, 2008). Mitchell and Sackney (2009) remark that the shared vision and values among PLC of school provide direction and alignment for educational activity to the extent that it contains a compelling image of the kind of learning environment that the people in the school are trying to create.

Collaborative culture. At the core of school improvement is the transformation of a school culture so that it empowers and energizes the staff (Harris, 2002; Hopkins, 2002). Schools improve when individual teachers change their behavior, attitudes and beliefs (Harris, 2002; Hopkins, 2001). In collaborative school culture, there is a great deal of team-building, diverse groups working together, and intense communication and information sharing, and there are also a small number of integrative structures for key priorities, planning and problem-solving (Fullan, 2005). Peterson and Deal (2009: 11) remarked that in schools with positive work culture, the staff share strong norms of collegiality and improvement, collaborative problem solving, planning, and data-driven decision making, value student learning over personal ease, and assume all children can learn if conditions in school are favorable. Meaningful collaboration of teacher professional arises out of genuine interests or purposes held in common (Little, 2007).

Collaborative learning. Capacity-building from a relatively simple perspective is creating the experiences and opportunities for people to learn how to do things together and therefore collegial relations and collective practices are at the core of building the capacity for school improvement (Harris 2002). Hopkins (2001: 96) points out that a systematic and integrated approach to staff development that focuses on the professional learning of

teachers, which establishes student learning and learning outcome is an important focus and central to authentic school improvement. Harris and Muijs (2005) remark:

For collaboration to influence professional growth and development, it has to be premised upon mutual enquiry and sharing. . . . As teachers search for new understanding or knowledge with other teachers, the potential for school improvement is significantly increased. The school, as a learning community, is nurtured and sustained when individuals reflect upon, assess and discuss professional practice (p. 62).

In collaborative work culture, teachers come together to discuss issues, sort out challenges, plan new learning opportunities, and/or discuss new instruction or curriculum ideas. Through such extensive collaboration, teachers not only learn from one another, but they also enable the development of “socially distributed knowledge, whereby individual knowledge bases become part of the collective discourse and expand the professional capacity of the entire team” (Mitchell & Sackney, cited in Mitchell & Sackney, 2009: 26). Harris and Muijs (2005) remarked that by working collaboratively, teachers are able to consider the different ways in which the subject matter can be taught. Collaboration pools the collected knowledge, expertise and capacities of teachers within the subject area. It increases teachers’ opportunities to learn from each other between classrooms, between subject areas and between schools (p. 61).

Collaborative professional development learning through collegial collaborative learning framework among staff of a school is a powerful strategy to build sustainable internal capacity of a school. In this respect, several authorities (e.g., Glickman, et al., 2007; Gordon, 2004) advocate that collaborative professional development through *collegial collaborative strategies* (such as mentoring, peer teaching, peer coaching, and mutual observation and feedback) and reflective *collegial inquiry frameworks* (such as dialogue,

action research, reflective writing, study teams, quality review processes) are powerful levers of interdependence, collective commitment, and shared responsibility.

Collective learning. The collaborative culture leads naturally to the third characteristic: that learning communities are places where collective learning and shared understanding which is instrumental in uncovering and critiquing mental models in Senge's (1990) positions as a hallmark discipline of organizational learning (Mitchell & Sackney, 2009).

As part of collaborative learning process the PLC members come to realize the many ways to construct teaching and learning; and this kind of collegial learning not only yields common understandings about professional practice but also contributes to a shared belief that improving teaching and learning is a collective process. These types of common understandings and shared beliefs build communities of practice in which everyone in the school is part of a role that defines each individual's obligations and everyone is part of a reciprocal role relationship that spells out mutual obligations (McLaughlin & Talbert, 2006; Mitchell & Sackney, 2009; O'Donoghue & Clarke, 2010).

Members of PLC share their points of view and constantly seek to learn collectively, collaboratively and promoting desirable results in student achievement through consensus building and the sharing of information (Mullen, 2009). The learning environment of PLC is enhanced by the cooperation of all concerned in reflective inquiry and dialogue involving respectful exchanges of ideas on teaching and learning (Little, 2007; Mitchell & Sackney, 2009; Mullen, 2009). As teachers inquire into students' work and explore connections between practice and outcomes, they create knowledge of practice (McLaughlin & Talbert, 2006).

Shared personal practices. Teachers in successful schools provide support to one another through collaboration, observational and analysis of one another's teaching and

professional dialogue (Gordon, 2004). They have the shared belief that the collective actions are greater than the sum of individual actions. If collaborative professional development is to be effectively implemented in a school, teachers must willingly open their classroom doors and work with, teach, and learn from others (Waldron & Mcleskey, 2010).

Supportive conditions (relationships and structures). Building professional learning community of teachers requires certain precursor conditions to exist. Supportive conditions are structures and relationships that determine when, where, and how the staff regularly comes together as a unit to the learning, decision making, problem solving, and creative working that characterize professional learning community (Hord, 1997). These include supportive conditions relationships; and supportive conditions structures.

Supportive conditions Relationships. Positive relationships based on respect, access to expertise, and supportive leadership (Harris, 2002:62). Trust and trusting relationship among school communities (among teachers, between teachers and students, between teachers and principal) are frequently cited as precursor for building professional learning communities. Mooney and Mausbach (2008:152) describe that a relationship built on trust creates a safe and supportive environment that fosters communication, reflection, and growth, and the absence of mutual trust creates an environment of fear.

Supportive conditions structures. Supportive structures for effective PLC include issues of time and places to meet and talk; as well as interdependent teacher roles, communication structures, teacher empowerment and school autonomy (Harris, 2002:62). Supportive and shared leadership is another structural element to effective PLC. The pivotal role of school leadership is emphasized in ensuring the development and sustainability of PLC. Stoll (2010) emphatically states that “Leadership provides the energy source; it is the umbrella within which all other conditions and processes of connecting learning communities fit” (p. 480). Duignan and Cannon (2011) also emphasize supportive and shared leadership as

a framework for building professional communities of learners and learning environment for high quality teaching and learning outcomes (p. 28). School principals support the development of distributed leadership by being explicit regarding their willingness to share leadership responsibilities with others and by empowering others to share in decision making regarding substantive issues (Waldron & Mcleskey, 2010).

In conclusion, “collaboration” and “learning” of the staff are “two core concepts” in the discussion of PLC in the literature. Collaboration pools the collective knowledge, expertise and capacities of teachers within the subject area; and, thus, increases teachers’ opportunities to learn from each other between classrooms, between subject areas, and between schools. Other important concepts in the discussion of PLC in the literature include sense of community, focus on student learning, de-privatization of practice, reflective inquiry and dialogue, mutual trust, openness and collegial relationships.

2.3.2.4. Factors that Affect the Sustainability of School PLC and Challenges

There is a consensus among scholars that it is not easy, if not impossible, to build and sustain effective PLC of school. Professional learning community is not a commodity to be bought into school; rather, it is a process that arises from the growing trust and understanding between colleagues as they are given time, space and resources to engage in critical debate (Durrant & Holden, 2006:21). Studies into comprehensive school reform (CSR) identified a number of factors that explain why staff in some schools appears better able to engage in, and sustain learning than do their colleagues in other schools (e.g., Bolam, McMahon, Stoll, Thomas & Wallace. 2005; Kilbane, 2009).

In a review of empirical studies into the sustainability of PLC school in Indiana State, Bolam et al. (2005) identified eleven factors that affect the sustainability of PLC, many of which were also present in their research finding. These are (a) strong local capacity, (b) encouraging political context, (c) adequate funding, (d) positive student outcomes, (e)

alignment between the reform design and the school, (f) leadership continuity, (g) faculty retention, (h) faculty commitment, (i) practical concrete reform specifications structured into daily school life, (j) sustained professional development, and (k) protection from competing reforms (p. 186).

From review of literature, the following are challenges in building and sustaining effective PLC of school.

Staff turnover. Professional learning communities are vulnerable over time at moments of high teacher turnover or when key leaders leave. As emerging teacher leaders rapidly develop their skill sets, they become noticed by leaders higher up in the system or they themselves seek opportunities and challenges elsewhere, and become ready to move on (Stoll & Louis 2007: 188). In school improvement, leadership succession research indicates that unplanned headteacher succession is one of the most common sources of schools' failure to progress, in spite of what teachers might do. These studies demonstrate the devastating effects of unplanned headteacher succession, especially on initiatives intended to increase pupil achievement (Leithwood, Harris, & Hopkins, 2008: 29).

School-size and sub-cultures (Cultural balkanization). Several researchers reported the complex organizational structure of comprehensive high schools and subject department boundaries mitigate efforts to build whole-school learning communities (e.g. Hopkins, 2001; McLaughlin & Tolabert, 2006). It is found that effective PLCs of teachers in secondary schools are often found at grade levels, within departments, or sometimes across a whole school (McLaughlin & Tolabert, 2006). The larger the school, the more numerous the staff, and the more difficult it may be to engender strong identification among all staff with being members of a single community. To this end, it is believed that school size matter and small schools were found to be more engaging work environments for both adults and students (McLaughlin & Tolabert, 2006). School size plays an important role in structuring a

workplace's social dynamics, supporting better communication flow and greater face-to-face interaction (Sergiovanni, 2001).

Lack of support from outside. Schools need outside partners that enlarge their professional communities and their base of support, provide expanded opportunities for learning and leadership, and offer multiple avenues for the development of teacher commitment (Lieberman & Miller 2007: 107). It is difficult to see how a professional learning community could develop in a school without the active support of leadership at all levels (Bolam et al., 2005).

Teachers' lack of commitment. As an aspect of the teacher professionalism, the notion of professional learning community comprises a commitment to moral purpose, continuous learning and knowledge of teaching, educational context sensitiveness, collegiality, and commitment to change process to make a difference to school and students (O'Donoghue & Clarke, 2001: 90). In this vein, Hord (1997) emphasizes that at the heart of effective PLC of a school is an absolute commitment to improving the learning of each student through collaborative teams of teachers whose members work to improve learner outcomes.

Commitment is a key factor in teachers' work, and the level of this varies across teacher professional life phases. Regardless of initial commitment to teaching, teacher commitment may rise, be sustained or decline depending on influencing factors in teacher professional life experiences; and influenced by professional life phases (Day, Sammons, Stobart, Kingston, Gu, 2007: 235). In their research, Day et al. (2007) brought into a single framework the factors that affect teacher commitment, motivation and perceived effectiveness across teacher professional life phases/career phases. The key influencing factors identified as shaping teachers' professional lives are (i) situated factors, such as pupil characteristics, site-based leadership, and staff collegiality; (ii) professional factors, such as teachers' roles and responsibilities, educational policies and government initiatives; (iii) personal level factors,

such as health issues and family support and demands. Over a professional life span, it is the interaction between these factors and the ways in which tensions between these and personal/professional identities are played out and managed that produces relatively positive or negative outcomes in terms of teachers' motivation, commitment, resilience, and perceived effectiveness (p. 89). The unfavorable presence of these factors will negatively affect teachers' sense of professional identity, moral purpose and motivation to make a difference to school and student learning and learning outcome.

2.3.3. Leadership as Capacity for Sustainable School Improvement

Harris and Lambert (2003) defined leadership capacity as broad-based, skilful involvement in the work of leadership by teachers, parents, pupils, community members, and local education authority personnel and universities. Teacher leadership is at the heart of building broad-based leadership capacity of school. Besides, teacher leadership is believed to solve the problem of succession for sustainable school improvement (Sergiovanni, 2001). From this stance, notwithstanding the importance of the leadership of the head person (i.e., the school principal), there has been strong advocacy for distributed leadership, especially that of shared leadership of teachers as a pivotal factor for sustainable school improvement and organizational learning (e.g., Harris & Lambert, 2003; Harris & Muijs, 2005; Lambert, 2003; Spillane, Camburn, Pustejovsky, Pareja, & Lewis, 2009; Spillane & Healey, 2010).

Education scholars advocate that those in the formal leadership positions need to give attention to fostering teacher leadership, building teachers' commitment to change and creating a culture in which teachers can develop their professional knowledge and skills (Durrant & Holden, 2006; Leithwood & Jantzi, 2006). In this regard, it is believed that school principal (the head) is the most important person in fostering shared leadership; in building collaborative culture of school; in building professional learning community of teachers; in enabling teachers the social construction of meaning, shared norms and values (Leithwood, et

al., 2010; Harris & Muijs, 2005); in setting the direction for school improvement; in developing people; in refining and aligning the organization and improving the instructional program (Day et al., 2011).

2.3.3.1. School Principal's Leadership Practices for Sustainable School

Improvement

As contemporary school improvement literature indicates, successful school principals ensuring sustainable school improvement are those who had substantial effect on school conditions as well as on student learning and learning outcome. In this regard, meta-analysis of the effects of transformational leadership on organizational conditions and student learning outcome led to a school leadership model that integrates the transformational and instructional leadership behaviors into a single framework. This is predicated upon the belief that the potency of transformational leadership for improved student learning and learning outcome increases when it focuses on the management of instructional program and the specific classroom practices that the school principal can stimulate, encourage, and promote.

To this effect, through a robust review of published and unpublished school transformational leadership studies that had conducted in 1996–2005, Leithwood and Jantzi (2005) concluded that refining school transformational leadership conception seems likely to be more productive than adopting an excessively narrow conception of school leadership only to suggest the need to have elements of other models glued on. But, they remarked that the model does not need another adjective in front of the term leadership.

When it comes to maintaining a research focus long enough to actually learn something with a reasonable degree of confidence, the field of educational leadership studies is a notoriously unstable one. So celebrating the persistent line of work evident in our review and encouraging others to pursue it is clearly warranted. The field does not need yet another adjective in front of the term leadership. It needs

the firm empirical footing only a substantial accumulation of theoretically informed evidence can provide (p. 194).

Accordingly, Leithwood and Jantzi (2005) refined their earlier eight dimensional transformational leadership model into four broad categories of leadership practices – setting directions, developing people, redesigning school organization, and managing the teaching and learning program. The first three dimensions are largely the transformational leadership behavior, whereas the fourth dimension incorporated the “instructional program management dimension” of the instructional leadership model advocated by Hallinger and his colleagues.

Drawn on the writings of Day and Sammons (2013), Day et al. (2011), Leithwood, Harris, and Hopkins (2008), Leithwood and Riehl (2005), each of the four leadership practice dimensions and the sub-dimensions are described below.

Setting direction. This dimension is concerned with the leader effort to motivate his/her colleagues (Day & Sammons, 2013; Leithwood, Harris, & Hopkins, 2008). It is about establishing shared purpose as a basic stimulant for one’s work. In this regard, mission-building activities on the part of principals are influential set of leadership practices (Day et al., 2011). In the literature three more specific sets of practices are included in this category, all of which are aimed at bringing a focus to both the individual and collective work of staff (Day & Sammons, 2013; Leithwood, Harris, & Hopkins, 2008). Undertaken skillfully, these practices are one of the main sources of motivation and inspiration for the work of staff (Day et al., 2011). These are building shared vision, fostering acceptance of group goals and high performance expectations.

Leaders help set direction by encouraging staff to develop goals that are shared and demonstrate their expectations for quality and high performance from staff (Day et al., 2011; Leithwood & Riehl, 2005). When visions are value-laden, they can lead to increased commitment from organizational members and provide compelling purposes for continual

professional growth (Leithwood & Riehl, 2005). Leaders' set of practices and behaviors 'aimed at promoting cooperation among teachers and getting them to work together toward a common goal are important aspects of fostering group goal (Day et al., 2011).

Developing people. This dimension of transformational leadership consists of practices that have significant contribution to the motivation of staff. Their primary aim is building not only the knowledge and skills that teachers and other staff need in order to accomplish organizational goals but also the dispositions (commitment, capacity and resilience) to persist in applying the knowledge and skills. The specific practices in this category are providing individualized support and consideration, fostering intellectual stimulation, and modeling appropriate values and behaviors (Day & Sammons, 2013; Leithwood, Harris, & Hopkins, 2008). Behaviors included in the practice of intellectual stimulation include encouraging colleagues to take intellectual risks, re-examine assumptions, to look at their work from different perspectives (Day et al., 2011). Leaders offer intellectual stimulation by providing opportunities for in-depth conversations about teaching and schooling, making informational resources available, supporting well- organized programs for professional development, and introducing new ideas for the school to consider; provide support to staff by showing respect and concern about their personal feelings and needs; and provide *appropriate model* by setting examples, values and goals for others to follow (Leithwood & Riehl, 2005). By citing the work of Locke; Hallinger; and Waters, Day et al. (2011: 21-23) pointed out significant effect of maintaining high visibility in the school by school principal a visibility associated with high quality interactions with both staff and students.

Redesigning the organization. The specific practices included in this category are concerned with establishing working conditions, which allow teachers make the most of their motivations, commitments and capacities (Day & Sammons, 2013; Leithwood, Harris, & Hopkins, 2008). These specific practices are building collaborative cultures, restructuring, the

organization, building productive relations with parents and the community, and connecting the school to its wider environment. These practices explain significant variations in teachers' beliefs about and responses to their working conditions (Day & Sammons, 2013; Leithwood, Harris, & Hopkins, 2008). Leaders influence organizational culture through practices aimed at developing shared norms, values, beliefs, and attitudes and promoting mutual caring and trust among staff; and they redesign organizational structures through changes in staff and task assignments, the scheduling and design of time and space, and the deployment of technology and other material resources, (Leithwood & Riehl, 2005).

Managing the teaching learning program. As in the dimension of redesigning the organization, the specific practices included in this dimension aims to create productive working conditions for teachers by fostering organizational stability and strengthening the school's infrastructure. Specific practices are staffing the teaching program, providing teaching support, monitoring school activity, and buffering staff against distractions from their work (Day & Sammons, 2013; Leithwood, Harris, & Hopkins, 2008).

Providing support teaching includes supervising and evaluating instruction, co-ordinating the curriculum, and providing resources in support of curriculum, instruction and assessment activity; and for leaders of schools in challenging contexts, it includes controlling behavior, boosting self-esteem, and talking and listening to pupils (Day et al., 2011). In schools that show impressive achievement gains, educational leaders maintain a clear and consistent focus on improving the core task of teaching, and they accept no excuses for failure; they help teachers to understand how they can work more effectively with their students (Leithwood & Riehl, 2005).

Using this four dimensional model of school leadership practice, a study by Leithwood & Jantzi (2006) concluded that transformational approaches to school leadership has significant influence on changes in teachers' classroom practices that lead to greater pupil

learning. It is found that transformational leadership practices in this model have both direct and indirect effects on teachers' practices, the indirect effects being realized through leaders' influence on teachers' motivation, capacity, and work settings.

Our purpose in this study was to test the effects of a transformational model of school leadership, effects on teachers, their classroom practices, and student learning. We did this in a context relevant to many school leaders around the world—large-scale efforts initiated by those in government to improve local schooling (p. 202).

A further evidence of the pertinence of Leithwood and Jantzi's (2005) transformational leadership model for sustainable school improvement is found in the work of Day et al. (2011). Through three years quantitative and qualitative study in primary and secondary schools, Day et al. (2011) confirmed that the leadership practices of successful school principals fall into four categories: setting direction (defining vision and vision, and building shared vision and purpose); developing people (providing individualized support, intellectual stimulation, provide appropriate model); refining and aligning organization (building collaborative culture, for example, development of professional learning communities; restructuring and redefining responsibilities); and improving teaching and learning programs (improving conditions for teaching-learning and developing high expectations). In fact, Day et al. (2011) study had made clear that the relative importance of the four dimensions vary across the differential school improvement stages. School leaders use transformational and distributed leadership behavior for schools at medium and high level improvement rather than for low start schools.

Overall, studies of leadership for sustainable school improvement consistently support the pertinence of transformational leadership. It is advocated for its pertinence in building school cultures/behaviors needed for sustainable school improvement, such as developing

school norms, values, beliefs and assumptions that are student-centered, support continuing professional development of teachers, and the creation of professional learning communities. Transformational leaders increase the capacity of others in the school to produce first-order effects on learning (Barnett, 2003; Harris et al., 2003; Leithwood & Jantzi, 2006; Ross & Gray, 2006). In this regard, transformational leaders create a climate in which teachers engage in continuous learning and in which they routinely share their learning with others (Leithwood, Louis, Jantzi, & Steinbach, 1999). As such, transformational leadership increases the commitment of the staff through creation of relationship between what the staff is trying to accomplish and the mission of the school. These changes are conceived as *second-order* effects in the sense that the principal is creating the conditions under which others are committed and self-motivated to work towards the improvement of the school without imposed direction from above (Hallinger, 2003; Leithwood & Jantzi, 2006).

Kruger & Scheerens' (2012: 23) meta-analysis of the impact of different leadership styles had confirmed that transformational leadership is helpful in transforming the school culture in a ways that facilitate collegial planning, collaboration and experimentation aimed at school improvement. Kruger & Scheerens (2012: 23) further remarked the importance of transformational leadership for increasing the intrinsic motivation of teachers and creating a learning school by transforming teachers into learning community. Davies, Ellison, Bowring-Carr (2005) in their book "school leadership for 21st century" comment that "if schools are to sustain student performance and move on to deep learning, rather than just addressing test-based short-term agendas, they need to develop leadership capability that has a strategic dimension, which is the quality of transformational leadership."

To date, the adaptation of transformational leadership model into educational setting is the legacy of Leithwood and his colleagues. Leithwood and Jantzi (1999b), Leithwood, Jantzi, and Steinbach (1999) carried out the most substantial adaptation of Bass's (1985)

transformational leadership into the field of school leadership. In a range of empirical studies (both quantitative and qualitative ones), they have developed, tested, refined and provided a seven dimension model of transformational leadership for school context. These seven dimensions are building school vision and establishing school goals; providing intellectual stimulation; offering individualized support; modeling best practices and important organizational values; demonstrating high performance expectations; creating a productive school culture; and developing structures to foster participation in school decisions (Hoy & Miskel, 2005; Lingard, Hayes, Mills & Christie, 2003; Moos & Huber, 2007; Nguni, Slegers, & Denessen, 2006).

Using this seven-dimensional model, a handful of studies by Leithwood and his colleagues (e.g., Leithwood & Jantzi, 1999a; Leithwood, Jantzi, & Steinbach, 1999) and others (e.g., Barnett, 2003; Nguni, Slegers, & Denessen, 2006; Ross & Gray, 2006) examined the effect of transformational leadership on school conditions, teacher performance, and student learning outcomes. These studies reported significant effect of transformational leadership on school organizational conditions, teachers' emotion (satisfaction and commitment), teachers' performance (extra effort) and student engagement.

2.3.3.2. Distributed Leadership as School Capacity

Recent literature of school improvement advocates the pivotal role of distributed leadership for building leadership capacity of a school (e.g., Spillane et al., 2009; Spillane & Healey, 2010; and others such as Harris, 2008, 2009; Harris & Lambert, 2003; Harris & Muijs, 2005; Jackson, 2000; Leithwood & Jantzi, 2000; West et al., 2000). To cite, Jackson (2000) argues that one way of building school capacity for sustaining school improvement is seeking to develop distributed leadership model to move school community from the lowest common denominator of shared aims to the highest common factor of shared values and

beliefs. Leithwood and Jantzi (2000) empirical evidence suggest that teacher leadership has an equal, albeit small, impact on student engagement as do school principal leadership.

Harris (2002: 116) expounds that within improving schools, leadership is not the responsibility of a single individual but a collective responsibility of school community. In such schools, leadership is viewed in a distributed way where teachers are also leaders and contribute to the overall direction and vision of the school. In the same vein, Harris and Muijs (2005: 14) expound that the type of leadership which leads to school improvement is not only one that is necessarily aligned to the formal leadership role or function, but is more of a dynamic interaction between individuals within an organization, which is a catalyst for change. In this sense, leadership is located between and among individuals within an organization; it belongs to a broad group of people, including non-teaching staff, parents and students, who all contribute to the school's distinctive culture and community (Spillane et al., 2009; Spillane & Healey, 2010). In this vein, Harris (2008) states:

Unlike many other cotemporary leadership theories or models, distributed leadership is a form of leadership not restricted by organizational or structural constraints. Rather it is a model primarily concerned with leadership practices and *interactions*, rather than the action of individuals in the leadership position or role. It is also a model of leadership that implies *broad-based interventions* in the practice of leadership, i.e., involving teachers, other professionals, students, parents and the wider community in decision making (pp. 37-38).

This implies that, wherever exists within the organization, distributed leadership concentrates on engaging expertise rather than seeking this only through formal positional leadership role (Harris & Muijs, 2005: 28). From this vantage point, distributed leadership within school simply means that formal leadership roles are shared among teachers in a school, with some teachers leading others in areas where they have particular expertise

(Fleming & Kleinhenz, 2007:27). In distributed leadership, it is the individual differences of team members that become the collective strength. Through collaborative efforts teams can shape common purpose, agree on performance goals, define a common working approach, develop high levels of complementary skills, and hold themselves mutually accountable for results (O'Donoghue & Clarke, 2010: 62).

As mentioned earlier, the notion of distributed leadership includes pupils. Through school councils and other forms of participation, schools provide opportunities for pupils to participate in the decision-making and leadership of school (Harris, 2002; Hopkins, 2001). In schools with a highly developed improvement capacity, not only do staff members at a variety of levels take on leadership and cultural transmission roles, but so do students. Students are seen as a significant voice, as co-leaders in the school improvement efforts, as well as the prime focus for school improvement activity (West et al., 2000: 47). In effective school literature, there is strong evidence that success is associated with a sense of identification and involvement that extends beyond the teaching staff and includes pupils, parents and, other members of the local community (Hopkins, 2001: 97).

In summary, distributed leadership perspective is built upon the premise that principals, teachers, parents, and students are the key players in the work of schooling and, when working together, they form a concentration of leadership that is a powerful force in a school (Lambert, 2003). At the heart of the advocacy of distributed leadership is the claim that it forms the core of leadership capacity building for sustainable school improvement (e.g., Harris, 2008, 2009; Harris et al., 2003; Harris & Lambert, 2003; Harris & Muijs, 2005).

2.3.3.3. Teacher Leadership as School Capacity

Harris and Muijs (2005) emphasize that teacher leadership and teacher professional development practices are central to building the capacity for sustained school improvement. In the same vein, Lambert (2003) contends that teacher leadership is at the heart of the high

leadership capacity of school. She argues that because teachers represent the largest and most constant group of professionals in schools and districts, their full participation in the work of leadership is necessary for high leadership capacity.

In contrast to traditional notions of leadership that is premised upon an individual person managing hierarchical systems and structures, the notion of teacher leadership connotes the idea that all teachers are leaders in that they all have a shared sense of purpose, participate in decision-making, collaborate and engage in teamwork and, most importantly, accept individual and joint responsibility for the outcomes of students' learning (Fleming & Kleinhenz, 2007: 28).

Teacher leadership is a model of leadership premised on the principles of professional collaboration, development and growth, with the core focus of improving teaching and learning in a school (Harris & Lambert, 2003: 43). There is shared understanding and shared purpose at the core of teacher leadership for it engages all those within the organization in a reciprocal learning process that leads to collective action and meaningful change (Harris, 2002: 78). Harris and Muijs (2005: 65) distilled from the literature six major activities of teacher leaders which require support and development. These are (a) continuing to teach and to improve individual teaching proficiency; and skill; (b) organizing and leading peer review of teaching practices; (c) providing curriculum development knowledge; (d) participating in school-level decision-making; (e) leading in-service training and staff development activities; and (f) engaging other teachers in collaborative action planning, reflection and research.

By reviewing school leadership literature in the current era of distributive leadership perspective, Forrester and Gunter (in Earley et al., 2012: 27) identified four approaches to be important and common. First is a 'directive approach' based on the head-teacher strong sense of his/her own purpose and what he/she wants to achieve. Second, the 'directed approach' is one in which the head-teacher is equally clear but the direction is influenced

strongly by external groups such as governors, inspectors and officials. Both approaches have aspects of heroic, transformational and inspirational leadership. Third is an 'inclusive approach', in which the school community, led by the head, but with active participation, develops a collective vision and contributes widely to school leadership. Fourth is a 'distributed approach' in which the school head used to delegate internal responsibility for specific tasks but the school closely follows policy definitions of good practice. A particular school's approach will be influenced by a mix of factors including leadership values, the experience of leaders and staff and the school's context (Day et al., 2011; Earley et al., 2012).

Teacher leadership is not replacement approach, but rather the idea to suffuse school communities with the values, processes and cultures that enable human beings to flourish, grow and enjoy learning together, where the principal and teachers are working in parallel to build school capacity more than a piecemeal individual support (Durrant & Holden, 2006:166). School principal it is the most important person for facilitating and fostering the extent of teachers' collective learning of new practices in arranging time for collaborative dialogue and to enable the social construction of meaning, shared norms and values among the professional community of teachers (Leithwood, et al., 2010), to set direction and restructure school organizational (Day et al., 2011: 229). In their study about the practice of distributed leadership in elementary and secondary schools in England, Day et al., 2011 reported that:

Head teachers are perceived to be the main source of leadership by key school staff. Their educational values, reflective strategies and leadership practices shape the internal processes and pedagogies that result in improved pupil outcomes. The leadership of the head has a direct effect on teachers' expectations and standards (p. 229).

A review of teacher leadership studies by Harris and Muijs (2005) indicate that where teachers work collaboratively and where leadership responsibilities are devolved, teachers' expectations, morale and confidence are significantly enhanced. From review of empirical studies, Harris and Muijs (2005) concluded that student outcomes are more likely to improve where leadership sources are distributed throughout the school community and where teachers are empowered in areas of importance to them. In their study, Leithwood and Jantzi (1999a, 2000) also concluded that teacher leadership far outweighed principal leadership effects before taking into account the moderating effects of family educational culture.

Harris and Muijs (2005: 18-21) provide four forms of the teacher leadership practices from review of the literature – lead teachers, subject and department leaders, co-coordinators, and informal leaders.

Lead teachers are those teachers who are appointed to “teacher leader” roles for specific purposes, such as the appointment of experienced practitioners to posts dedicated to improving colleagues' performance (e.g. as coach/advisors, mentors, or school-level instructional leadership teams). Subject and department leaders are responsible for formulating and implementing policies for the subject or area of work (e.g., devising short, medium, and long-term plans for setting challenging targets, for promoting effective practice, and for reviewing progress). Most importantly, subject and departmental leaders are responsible for ensuring that the teaching within the subject area is effective; that teaching is regularly and systematically monitored and evaluated; that student targets are set; and that resources are used efficiently.

Coordinators are teachers who have been designated as mentors, coordinators of continuing professional development, special educational needs coordinators and facilitators of action research. There are a variety of roles in which teachers are called upon to support the professional learning of their colleagues, which include the induction and mentoring of

teachers new to the school and the coordination of continuing professional development activities. Informal teacher leadership refers to the exercise of leadership by teachers regardless of position or designation, also referred to as “invisible leadership”.

In summary, teacher leadership is believed to be a pivotal factor for sustainable school improvement and organizational learning. It is believed that teacher leadership is at the core of building broad-base leadership capacity of school and solves the problem of school leadership succession. Research suggests that teacher leadership enhances teachers’ sense of responsibility, collaboration, expectations, morale and confidence.

2.3.4. School-Based Continuous Professional Development of Teachers as School Capacity

In education, Continuous Professional Development (CPD) attracted the attention of many countries, mainly due to the demand for quality education in the current rapidly changing environment (Craft, 2000). From this stance, professional development is a continuous learning of teachers focused on the central goal of making a difference in the lives of diverse students; it is the sum total of formal and informal learning pursued and experienced by the teacher in a compelling learning environment under conditions of complexity and dynamic change (Harris & Lambert, 2003: 116). CPD is increasingly seen as a key part of the career development of all professionals, including health, agriculture, law and education (Harris & Muijs, 2005).

Traditionally, the practice of teacher professional development in both developed and developing countries had been dominated by off-site sources of trainings as opposed to job-embedded (school-based learning); it was geared towards individualized learning as opposed to collaborative learning; and it was externally designed and imposed to serve standard based education reform programs of the government (Gordon, 2004). However, with the advent of school level educational change perspective in mid-1980s, professional development of

teachers was evolved into a much more sophisticated theoretical concepts and methods, which takes an account of school culture, work-based learning and professional learning communities come to being (Bolam & McMohon, 2004:51).

Contemporary literature emphasizes school-based professional development of teachers that is built into the day-to-day work of teaching and involves collaborative learning, peer support, generation and use of evidence to improve practice (Durrant & Holden, 2006:3; Mooney & Mausbach, 2008). A growing body of research evidences that teachers' professional learning is most powerful, long lasting, and continuous when it occurs as a result of being a member of a group of colleagues functioning as professional learning communities engaging in joint work, critical reflection, and problem solving for the purpose of promoting their own learning and the learning of their students (Lieberman & Miller, 2007:105). However, such professional learning communities are built as teachers, unpacking the baggage of years of unexplained attitudes, beliefs, and practices, come to trust one another enough to participate in group discussions about their own practices in teaching and learning (Lieberman & Miller, 2007: 107).

Effective schools in implementing school improvement program/reform develop a system that support teachers' professional learning to ensure sustained student achievement gains. In this regard, Ethiopian of Education documents (MoE, 2009) stresses the pivotal role of school-based CPD of teachers. As standard, depending on career development stage, every teacher is expected to spend 60 hours or more per annual on individualized school-based CPD practice. Furthermore, schools as well as local education authorities are expected to identify teachers' training needs and offer short term trainings, such as seminar and workshop.

On the other hand, *off-site (out of school learning)* professional development makes particular contributions to school-based teacher communities across the developmental

spectrum (McLaughlin & Talbert, 2006: 65). To this end, outside partners, such as district education office, universities, local non-governmental organizations are expected to support in-school collaborative professional learning of teachers through consultancy, or otherwise through direct provision of CPD programs that they externally design for schools. In this regard, the key factor in ensuring effective CPD is matching appropriate professional development provision to particular professional needs. The fit between the developmental needs of the teacher and the selected activity is critically important in ensuring that there is a positive impact of CPD program at the school and classroom level. Where staff development opportunities are poorly conceptualized (insensitive to the needs and concerns of individuals and/or not related learning experiences to workplace), they make little impact upon teachers or their pupils (Muijs, Day, Harris, & Lindsay, 2004: 295).

Overall, it is believed that, in today's world and in the foreseeable future, teachers need to engage in school-based teacher CPD in three settings to keep pace with and respond to the demand on education changes by the public, and to retain their energy, enthusiasm and commitment to high-quality teaching (Day & Sachs, 2004: 13) espoused by the new professionalism of teachers in which teachers are expected to be well-suited to the new circumstance, albeit with an updating of knowledge and skill (Caldwell, 2000: 77). These are *direct learning* through, for example, conferences, workshops, consultations. in-school collaborative/collective learning (school-based learning) through, for example, peer coaching, mentoring, critical friendships, action research, team planning and assessment, appraisal, and *off-site (out of school learning)* through, for example, school-led renewal or reform networks, school-university partnerships, subject or phone-specific networks, and professional development centers.

2.3.5. Culture as School Capacity

Fullan (1998) argues that the reason for the failure of many school improvement reforms is a mere focus on school organizational restructuring with no attention to re-culturing process (i.e., changing the norms, values, and relationships in schools), which, he believes, is a more expedient way to improve teaching and learning. Hopkins (2005: 17) describes that if one changes structures too radically without paying attention to the underlying culture, then one may get the appearance of change (change in structure), but not the reality of change (change in culture). Hopkins argues that structure and culture are interdependent, and the relationship between them is dialectical.

Structure influences culture, but it works the other way around too. Structures are often regarded as the more basic and profound, in that they generate cultures which not only allow the structures to 'work', but also justify or legitimate the structures. On the other hand, changes in culture *i.e.* value systems and beliefs, can change underlying structures. The two go hand in hand and are mutually reinforcing (p.17).

Scheerens (2005: 74) explains that structure appears to be more directly (and therefore more easily) malleable than culture and that "structural" factors (such as planning, monitoring, parent involvement, educational leadership) and "cultural" factors (such as expectations, achievement orientation, cohesion) are important structural elements to shape and change school culture.

Attention to school culture, as part of school reform, was driven by evidence that traditional school cultures, based on norms of autonomy and isolation, creates a work context in which realizing the central aspirations of school reform is highly unlikely (Leithwood, Begley, & Cousins, 1994: 134). Studies of school culture (e.g., Deal & Peterson, 1999; Peterson & Deal, 2002, 2009; Stoll & Fink, 1996) evidenced that collaborative professional culture provides a momentum for school improvement as opposed to the traditional isolate

culture. Generally, these school culture studies were focused on three inextricable human factors: (a) the nature of relationships among members of school community, especially among professional colleagues; (b) professional norms reflected in carrying out school activities; (c) the values and beliefs that govern such relationships and norms in the school. In line with these factors, school improvement literature discusses school culture along two lines—cultures that hinder school improvement (negative school cultures), and cultures that support school improvement (positive school culture).

First, negative school culture domains is the isolate culture, which is characterized by little interaction and communication among staff because such schools were functioning under the traditional belief in independent professional work of teaching (Leithwood, et al., 1994; Little, 2007; Peterson & Deal, 2002). In isolate culture, if there is interaction and communication for information exchange, it is infrequent, short, and dominated by personal (non-teaching) topics; teachers had little knowledge of one another's teaching or little familiarity with students outside their own classes; time available outside the classroom would be limited and would be devoted to individual pursuits (planning, grading papers, calling parents, taking a break) but not to collaborative work related to teaching (Little, 2007: 53).

At worst, school culture may be toxic culture that dampen enthusiasm, reduce professionalism, and depress organizational effectiveness. The features of toxic culture (Deal & Peterson, 1999) are lack of shared purpose or a splintered mission based on self-interest; staff members who find most of their meaning in activities outside work; viewing the past as a story of defeat and failure; norms of radical individualism, the acceptance of mediocrity and an avoidance of innovation; little sense of community where negative beliefs about colleagues and students abound; a dearth of leadership in the principal's office and among staff; positive role models unrecognized in the school and community; social connections

that have become fragmented and openly antagonist; and a sense of hopelessness, discouragement, and despair rather than hopes, dreams, and a clear vision. Toxic culture is formed over time as the staff and leaders face challenges in trying to solve problems and cope with tragedy and difficulty, and when they build up negative views of their work, their abilities, and their students.

In positive cultures, one would find an underlying set of norms and values, history and stories; hopes and dreams that are productive, encouraging, and optimistic; positive relationships abound around a strong sense of connection to the core mission (Peterson & Deal, 2002:87). Within positive school culture domain, there is collaborative culture as opposed to traditional isolate culture; collaborative professional culture is student-centered and based on norms of supportive and positive interaction with students; teachers have a shared technical culture built on norms of collegiality, collaborative planning, and continuous improvement mind set; staff and the student body are cohesive and have a strong sense of community. At most, a culture of collaborative learning community, which appears to be adaptive to increasingly prevalent conditions associated with calls for reforms, such as new and more complex expectations for student outcomes, high expectations by the public for its schools and many associated, external pressures for change, a rapidly expanding body of technical know-how concerning instruction and changing family environments (Leithwood, et al., 1994: 134).

Allegedly, it is advocated that professional learning communities reverse the isolation of teachers and offer a place for teachers to work together and connect with each other about their own work and the work of their students (Lieberman & Miller, 2007: 105). Research on teacher learning community consistently evidenced that some aspects of a school's professional culture, especially a collective responsibility for student success, are associated with student achievement (Little, 2007: 54).

In summary, research in school culture evidenced that collaborative professional culture provides a momentum for school improvement as opposed to the traditional isolate culture. School improvement literature discusses school culture along two lines: cultures that hinders school improvement (negative school cultures), and cultures that support school improvement (positive school culture).

2.3.6. Empowerment and Engagement of Students, Parents and the Community as School Capacity

2.3.6.1. Empowerment of Students as School Capacity

Nowadays, the construct empowerment is applied in many disciplines (e.g., in community development, psychology, education, economics, and organizational management) that its definition varies across these disciplines (Aloysius, 2013). The concept of empowerment, therefore, involves different notions embodied in several disciplines and perspectives that it is difficult to offer unitary definition encapsulating the overarching usage of the term across the various disciplines and perspectives. It is a multi-dimensional and multi-level construct being applied in diverse ways as occurring within the psychological, political, and social dimensions (Lincon, Travers, Ackers, & Wilkinson, 2002). Nevertheless, it is often conceptualized as both a process and an outcome comprising persons or groups' ability to control or influence significant events in their lives (Aloysius, 2013; Harvey, 2004-13; Lincon et al., 2002; Lord & Hutchison, 1993).

To this end, the concept of student empowerment is emerged from the belief that providing skills to students, authority, resources, motivation, as well as holding students responsible for the result of their actions will contribute to their competence and satisfaction (Aloysius, 2013). Harvey (2004-13) defines student empowerment as the development of knowledge, skills and abilities in the learner to enable them to control and develop their own learning. Empowering students and creating an empowered learning environment will

potentially develop students' ownership in the learning process. To this effect, one way of empowering students is the conceptions of classrooms as communities of learners helping each other to transform latent capabilities to active powers for the enhancement of all (Harris, 2002; Segiovanni, 2001; O'Donoghue & Clarke, 2010). Harris (2002) and Segiovanni (2001) explain that that empowered students take the responsibility for their own behavior in class and are cooperative with peers to learn in cooperative/collaborative groups.

Improving schools enhance the quality of learning by involving students centrally in the learning process and ensuring that they feel empowered to learn. To this effect, teaching strategies reflect not just the teacher's classroom management skills, but also the ability of the teacher to help students expand their learning capability (Harris, 2002). Teachers build learning capacity within their classrooms (a) when students work together as part of a team sharing experiences, being given different roles and developing their own self-esteem and confidence; (b) when students are helped "learn how to learn", and actively involved in a review and reflection of the learning process, which is effected when students use formative and motivational forms of assessment that reinforce learning (Harris 2002; O'Donoghue & Clarke, 2010).

Until recently, in most public schools of Ethiopia students lack the ability or power in several schooling aspects. This include, among others, disciplinary misbehaviors; lack of taking responsibility for their own learning; and lack of motivation and confidence in their academic success. In this connection, one of the standards of teaching learning domain in Ethiopian SIP guideline (MoE, 2010:15) is stated as "Students have developed a habit of taking responsibilities and leading a disciplined life." The indicators specified in the document include percentage of students in functional student clubs; number of students volunteering to teach/mentor younger students in the school; number of discipline cases per semester; and number of students.

Indeed, student empowerment includes the involvement of students in school leadership and decision making affairs relevant to them. In schools with a highly developed improvement capacity, students are seen as a significant voice, as co-leaders in the school improvement efforts, as well as the prime focus for school improvement activity (West et al., 2003). Involvement of students in the leadership of their school is an important aspect of school's leadership capacity to ensure sustainable improvement (Harris, 2002). To this effect, student councils or unions could be established in schools so that students participate in the administration of schools in an organized manner (Hopkins, 2001; UNESCO, 2005). Involving pupil leaders in certain aspects of the management of schools will enhance a principal's authority; it will give students opportunities to experience shouldering responsibility and at the same time to develop as leaders (UNESCO, 2005).

In model schools under study, it is therefore important to assess the extent to which students were empowered to take responsibility for their own learning individually and in group with the sense of communities of learners helping each other; and as the result of such empowering processes, the extent to which they have developed the ability, confidence, and motivation to succeed academically (academic empowerment); take responsibility for their behavior in the classroom and in the school compound including behavior towards their teachers, respecting rules and regulation, adhering to classroom norms, and the absence of disruptive behavior such as skipping school or getting into trouble, positive reactions to teachers and classmates (behavioral empowerment).

2.3.6.2. Engagement of Students as School Capacity

As applied to school, the term engagement involves the involvement, satisfaction, and the feeling of belongingness of students, parents, and the community with the school's performances (Jones, 2009; Willms, 2000). The concept of student engagement is based on the belief that learning improves when students are inquisitive, interested, or inspired, and

that learning tends to suffer when students are bored, dispassionate, disaffected, or otherwise “disengaged (Newmann, 1992).

Accordingly, recent researchers apply the notion of “student engagement” as a strategy to assess the extent to which students are fully involved and engaged intellectually, socially, physically, and emotionally in their school (e.g., Fredricks & McColskey, 2012; Jones, 2009; Taylor & Parsons, 2011; Willms, 2003). It is a multi-dimensional construct that includes behavioral, emotional/affective, and academic engagement (Fredricks & McColskey, 2012; Leithwood & Jantzi, 1999a; Yazzie-Mintz, 2009; Willms, 2003).

The behavioral engagement component involves the idea of students’ participation and involvement in academic, social, or extracurricular activities (Fredricks & McColskey, 2012; Willms, 2003). Survey questions within this dimension include questions about involvement in extracurricular activities, students’ interactions with other students, and students’ connections to the community within and around the school (Yazzie-Mintz, 2009). Academic engagement is about student engagement during instructional time and with instruction-related activities and it is defined as student’s level of investment in learning (Yazzie-Mintz, 2009). That is, being thoughtful, strategic, and willing to exert the necessary effort for comprehension and mastery of knowledge and skills. Survey questions often included are questions about homework, preparation for class, classroom discussions and assignments (Yazzie-Mintz, 2009) and teachers’ classroom behavior and relationships with students (such as expectation, support, encouragement, faire treatment), and subject and professional knowledge and skills (Jones, 2009; Taylor & Parsons, 2011).

The emotional/affective engagement (or belongingness) emphasizes students’ sense of belonging or attachment to school (Leithwood & Jantzi, 1999a; Silins & Mulford, 2007; Willms, 2003); or a feeling of appreciation of success in school-related outcomes (Jones, 2009; Taylor & Parsons, 2011); or feelings of the ways and workings of the school, and the

people within the school, feelings of the level of support students perceive from members of the school community, and students' place in the school community (Yazzie-Mintz, 2009). Affective/emotional component of student engagement is the extent to which students identify with their school and feel they belong; it is an internal state found to mediate a wide range of achievement and behavioral outcomes among students (Leithwood & Jantzi, 2000).

In short, student engagement is a three-dimensional construct: behavioral, academic, emotional/affective (belongingness). The behavioral engagement component involves the idea of students' participation and involvement in academic, social, or extracurricular activities. Academic engagement refers to engagement of students during instructional time and with instruction-related activities. The emotional/affective engagement (or belongingness) emphasizes students' sense of belonging or attachment to school; or a feeling of appreciation of success in school-related outcomes, or feelings of the level of support students perceive from members of the school community.

In connection to the aspects of school factors affecting student academic engagement, one of the standards in the teaching learning domain of SIP in Ethiopia (MoE, 2010: 15) states that "Students are motivated to learn and actively participate in lessons." In elaboration, MoE (2010:15) states that "If students are not motivated to learn then they will not learn. The other standard relating to physical facilities of school states, "Schools provide quality school facilities that enable all staff to work well and all children to learn" (MoE, 2010: 15).

2.3.6.3. Empowerment and Engagement of Parents and the Community as School Capacity

In relation to school and schooling affairs, parent and community empowerment appears to be related to the involvement of parents and the community in their children's education. It comprises of parent and community belonging and participation in school affairs (Agbo,

2007) Community participation includes parents taking part in school activities such as volunteering, PTA organizations, and special events (Agbo, 2007; UNESCO, 2005). Parent empowerment in school settings enables parents to advocate for their children through engaging in school reforms or systemic change activities (Driscoll & Goldring, 2005; UNESCO, 2005).

Parents and community are central to supporting the development of human, social, and financial capital for schools and their students (Driscoll & Goldring, 2005; UNESCO, 2005). As Agbo (2007) points out, the advocates of school-community relations believe that parent and community involvement will mobilize and create resources that schools may not be able to generate. To this effect, the first assumption is that the school and parents are willing partners in home-school links. The second assumption is that the school, parents and the community share power, and parents and the community have the empowerment, information, and know-how to influence important decisions.

The extent of partnerships between home and school are mostly influenced by teachers' and parents' practices, attitudes, beliefs, interests, and understanding of how to effectively involve parents (Agbo, 2007; Middlewood, Parker, & Beere, 2005; UNESCO, 2005). True partnerships with parents for educational success entail acknowledging and validating parents' views and ultimately, sharing power (Agbo, 2007; UNESCO, 2005). Meaningful empowerment of parents and the community to partake in school affairs and their satisfaction of the education of their children results in social capital (Driscoll & Goldring, 2005; Gelsthorpe, 2003).

The engagement of community in schools lies at the heart of the processes of educational leadership. It is the key measure of success to mutual community benefit and achievement where shared vision promotes commonly agreed aims for individuals, groups and organizations (Gelsthorpe, 2003). To this effect, the efforts of school principal and

teachers to involve parents and the community in school improvement affairs help schools solve many academic, behavioral and material problems of the school, which otherwise the school alone cannot solve. School principals and school faculties should work with parents and others who interact with the schools in ways that build trust and increase feelings of ownership of the schools (Schlehty, 2009; UNESCO, 2005).

On the other hand, the Parent-Teacher Associations (PTAs) should bring the school and the community closer in an atmosphere conducive to uniting the work of home and school. An effective PTA is the cementing agent toward bringing about higher levels of education, better mental and physical health, closer home relationships, and understanding the world (UNESCO, 2005). The empowerment PTAs to properly execute their duties of bridging the school and the community is an important leverage for the schools to ensure continuous improvement.

In summary, the empowerment and engagement of parents and the community comprises of parent and community belonging and participation in school affairs. But this requires (a) the school staff (especially school principal and teachers), as well as the parents and the community are willing and eager to work together; (b) parents and the community share power, have information, and know-how to influence important decisions.

2.3.7. Planning as School Capacity

The power of school self improvement lies in the development of the school's capacity to collaboratively analyze its current practices and plan interventions (McIntyre, 2011). In order to ensure continuous improvement in student learning and learning outcome, schools needs to plan and undertake a corporate process of reflection or evaluation (McIntyre, 2011; Schreerens, 2000). In the context of continuous school improvement (or any other planned change process) planning is a necessary and ongoing components of any healthy, evolving school (MacGregor, 2005; McIntyre, 2011).

School improvement planning is the process that enables the school to set challenging yet attainable and measurable outcomes for all aspects of its work in order to support continuous improvement in pupil learning and development (Davies & Ellison, 2003). The plan is a road map that sets out the changes a school needs to make to improve the level of student achievement (MacGregor, 2005) and shows how and when these changes will be made (Davies & Ellison, 2003). School improvement plan encapsulates a set of strategies the school will develop to secure and sustain school improvement; it brings together in one purposeful, practical and coherent plan, the national, local and school priorities, reflecting the aims and values of the school (Davies & Ellison, 2003; MacGregor, 2005).

There is no universally applicable prescription of perfect school improvement planning model that suits every school or school system (Davies & Ellison, 2003). Nevertheless, contemporary school improvement literature reveals that a good school improvement planning involves four stages: (a) school self-evaluation or review, or assessment stage; (b) the design or operational planning stage; (c) the implementation stage; and (d) the monitoring stage (e.g., Xaba, 2006). These stages of planning process comprises a framework in the form of recursive planning cycle revolving around a central core of the school, namely, the school's mission, vision and fundamental aims. In terms of this framework, the school has to formulate its vision, mission and fundamental aims which articulate the reason for the school's existence, what it wants to create and achieve, and what it considers to be the fundamental purpose of education. This forms the strategic intent that allows the building of meaning and purpose and time for building capacity to tackle the challenges of change and continuous improvement (Davies & Ellison, 2003).

SIP in Ethiopia emphasizes that schools need to make continuous improvement through the process of recursive self-evaluation and use of strategic planning (MoE, 2010). Schools are expected to prepare strategic plan of school improvement for every successive three

years. The implementation manual of SIP (MoE, 2010) indicates that the process of continuous school improvement comprises four recursive cyclic stages, which starts from self-assessment, then to planning, to implementation, to monitoring, and, finally, enter into self-assessment again, forming a recursive cyclic process.

In the literature, too, self-evaluation, sometimes called school self-review or self-assessment is the first step towards school improvement strategic planning. It is an essential part of an improvement process. It marks the very beginning of a permanent process of change that serve as a foundation to set vision, mission and aims of school improvement. As a follow-up evaluation, it launches each cycle of continuous school improvement planning (Bîrzea, Cecchimi, Harrison, Krek, Vrkaš, 2005).

Hence, developing appropriate self-evaluation knowledge and skills, and the commitment of school improvement committee and staff are the hallmarks of school improvement process through which a culture of continuous improvement emerges (Bîrzea, et al., 2005). It is essential that the school improvement team members have the necessary knowledge and skills for undertaking a self-evaluation. In enabling schools for meaningful self-evaluation it is necessary to provide training of school staff in evaluation techniques and the use of evaluation instruments; provide information and counseling for evaluators throughout the self-evaluation process; monitor the implementation of evaluation tools; analyze and interpret the findings.

The number and nature of these tasks and the details of the process of school improvement planning vary from context to context, but there is a common core of good practice. A crucial component appears to be that the process is supported by a simple and common evaluative instrument, usually provided nationally, that enables the school to formulate appropriate appreciations of their own performance. This evaluative framework

and the indicators can be used by a school to determine for themselves how well they are performing, and to identify areas to which they should give attention (Bîrzea, et al., 2005).

Following effective self assessment or self-evaluation, planning for continuous school improvement involves developing, first, school improvement strategic plan and, second, annual or yearly action plans of implementing the strategic plan. However, the effectiveness of both strategic plan and annual action plan depend on the school's capacity of preparing such plans in coherent manner.

2.3.7.1. Qualities of School Improvement Strategic Plan

Based on the identified patterns of strengths and weaknesses at self evaluation or assessment stage, the school improvement planning need to include: (a) elaboration of a development strategy including decisions on priorities for development during the following year, definition of development objectives, setting of targets within the capacity of the school to deliver; (b) identification of steps to be taken to reach objectives and targets, (c) Identification of ways in which the organization or management of the school needs to change in order to meet these new priorities and targets, and (d) the allocation of resources to this planned development.

However, as the school's resources of personnel, expertise, energy, time and money are limited, needs and possibilities must be prioritized in terms of (a) their importance to the development of the school;(b) the current capacity and commitment of the school to address them. In selecting priorities, it is important to be mindful of the need to achieve an appropriate balance between maintenance and development. Continuity with past and present practices must be maintained to provide the stability that is the foundation of new developments. Reforms do not necessarily change everything. Consideration must be given to the amount of development work on which the school has the capacity to sustain. To this

effect, school development planning must accommodate the consolidation of past change, the introduction of current change and preparation for future change (Davies & Ellison, 2003).

In general, school improvement plan should, at least, possess the following qualities of good plan that are commonly stressed by several authorities (e.g., Blandford, 2005; Davies, & Ellison, 2003; EQAO, 2005; MacGregor, 2005; Xaba, 2006): (a) Provides a review of previous plan and in this respect it provides sufficient information about strengths, weaknesses, level of progress in student achievement, otherwise stagnation or regression. To this effect, data for school self-assessment is properly collected, organized, analyzed and interpreted; (b) it should be reasonable. That is, it has a feasible number of goals and objectives for the resources (financial, time, people) available (c) identifies appropriate areas of focus based on reliable data and determine priorities; (d) lists specific goals/objectives with measurable performance targets for each priority area; (e) lists specific, actions and strategies for the achievement of each goal or targets; (f) identifies human and material resources for implementation; (g) provide realistic timelines of actions and places them in multi-year review; (h) identify who will be responsible for implementing each action. Responsibilities should be clearly allocated for the implementation, monitoring and evaluation of each of the action in the plan so that outcomes are achieved in the relevant timescale; (i) identifies indicators of success for each performance targets and expected results for each the priority areas or objectives; (j) provides the how of the implementation and monitoring of the plan, and if necessary, how the implementation of the plan is revised.

2.3.7.2. Qualities of Annual School Improvement Plan

To ensure the effective implementation of strategic plan, clear, concise and unambiguous annual plans are needed so that outcomes and success criteria are clear and disagreement can be avoided. Annual action plans have to be as detailed and realistic as possible. They have to specify outcomes or objectives to be achieved, action to be taken,

persons responsible for implementing those activities, the costs involved, time frames and monitoring mechanisms (Davies, & Ellison, 2003; , 2005; MacGregor, 2005; Xaba, 2006). Davies and Ellison (2003) further elaborate that the school must begin by setting targets or goal for pupils and then specify activities and associated outcomes which will support the achievement of these pupil targets. Outcomes and targets should be SMARTIES. The acronym SMARTIES stands respectively for **S**pecific; **M**easurable and monitored; **A**chievable and agreed; **R**elevant and resourced; **T**imed; **I**nteresting; **E**valuated; and **S**uccess-orientated. Thus, the content of the document should clearly show specific objectives, targets, details of the strategies and activities that contribute to achievement of the objectives, cost breakdown of activities; responsible bodies for implementation, and for monitoring mechanisms; and clear success criteria for each target.

2.3.8. School Improvement Program in Ethiopia

Cognizance of the low performance of the country's education in terms of quality, equity and efficiency, the Ethiopian Government had launched a nationwide General Education Quality Improvement Package (GQEIP) in 2007. GEQIP has six interrelated components that are systematically integrated to work together to improve the quality of primary and secondary education (MOE, 2008). GEQIP has been financed by a group of development partners such as DFID, the Netherlands, Italian Development Cooperation, Finland and SIDA, USAID and UNICEF.

GEQIP document (i.e., MoE, 2008) explains that the central aim of GEQIP is improving the quality of education by improving schools' effectiveness and efficiency through strengthening the leadership, the planning and management capacity at the point of service delivery; that is, the school (MoE, 2008).

School improvement program (SIP) is one of the six components of GEQIP. As an integral component GEQIP, the purpose of SIP is to improve and sustain the quality of

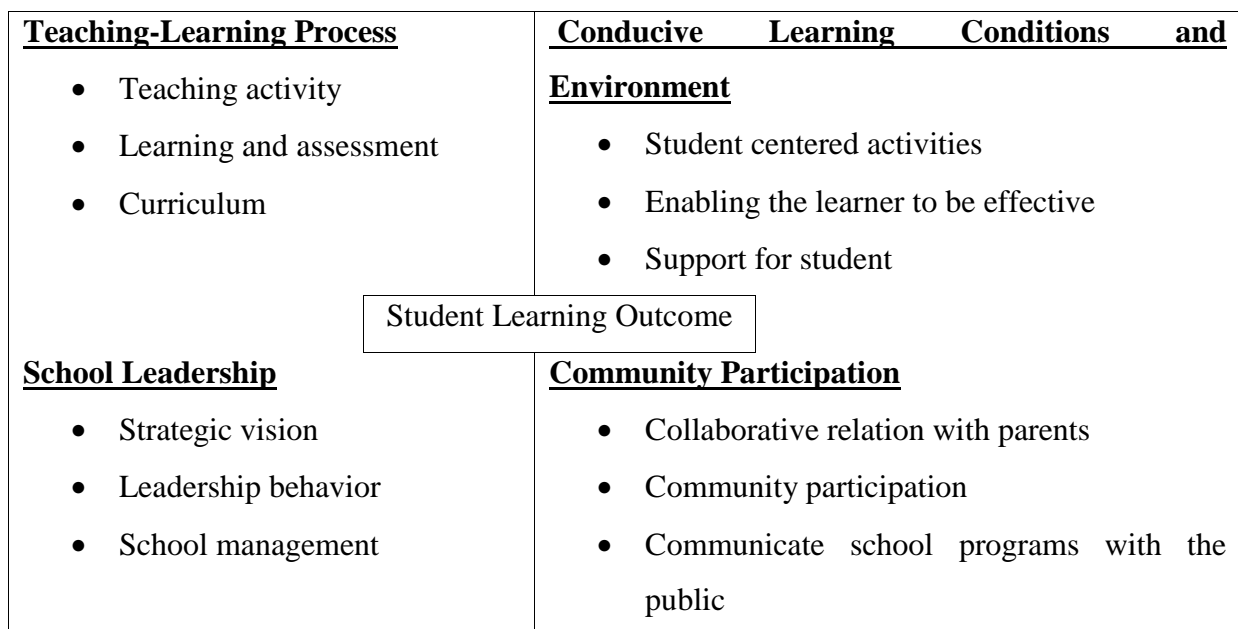
education by enhancing school-based management through strengthening school-level education management, leadership, and planning capacity (MoE, 2008, 2010c). In the first phase QEQIP implementation, the objectives of the school improvement program component were (i) to improve the capacity of schools to prioritize needs and develop a school improvement plan; (ii) to enhance school and community participation in resource utilization decisions and resource generation; (iii) to improve the government's capacity to deliver specified amounts of schools grants at the woreda level; and (iv) to improve the learning environment by providing basic operational resources to schools. To this effect, increased emphasis on community participation for resource mobilization and the provision of grants is meant to provide opportunity for meaningful school based needs assessment and planning for quality improvement.

Recently, the revised implementation guideline of SIP (i.e., MoE, 2011) listed three objectives of SIP: (i) to improve student learning and learning outcome, and student disciplinary behavior; (ii) to make the leadership of school effective, accountable, transparent, and participatory by ensuring good governance and democratic leadership, (iii) to make the leadership of school distributed among staff by ensuring structures for shared leadership (p: 6).

As the Ministry of Education documents on implementation of SIP (e.g. MoE, 2008, 2010c) indicate, the education quality improvement reform assumes individual schools as the center of excellence where the actual improvement that augments student learning and learning outcome shall take place. It places a school at a pivotal point of the education quality improvement process. It requires schools to prepare a three years duration strategic plan through continuous self-assessment and priority setting against the four school improvement domains and the corresponding sub-domains (called elements). To this effect, school implementation guide line (i.e., MoE, 2010c) provides specific elements of each domain;

standards for each element; and indicators of practice for each standard. Furthermore, it provides for each standard the corresponding indicators of practices against which the schools would write objectives and outcome/success indicators. In other words, the guide line provides a framework in which each school improvement domains is broken down into two or more elements and each element is broken down into two or more standards, and each standard still broken down into many indicators of practice.

Figure 2.1 below portrays the School Improvement Framework (the domains) in Ethiopia.



(Source: Adapted from MoE, 2011).

Figure 2.1: School Improvement Framework of Ethiopia

The essence each of the four domains of SIP in Figure 2.1 is explained hereunder as referred from implementation framework of SIP (MoE, 2010c, 2011).

Teaching-learning process. The standards for teaching-learning domain include, among others, teachers having professional competency and participative in continuous professional development such as experience sharing, meetings with other teachers or supervisors, action research, study groups, mentoring, and similar activities. It requires teachers to exhibit competencies and professional behaviors for effective teaching-learning

process, such motivation, commitment, good code of conduct, professional ethics, motivating students to learn, ability to understand student-learning differences in terms of sex, cognitive ability, learning style and to provide support (extra-effort) to augment student-learning outcome. It also requires teachers to be a model teacher in terms of maintaining student discipline in a class, dressing, believe in the supremacy of law. In addition, it also demands students to exhibit good code of conduct and behaviors for effective teaching learning process.

School leadership and Management. This domain places the school community (principals, teachers, students and parents) as the pivotal agents for continuous school improvement. However, while all school community members should work together in jointly identified areas of priority for school improvement, the school principal is a key person primarily responsible and accountable for successful school improvement. School management and leadership domain emphasizes the pivotal role of school principal in improving students' learning; supporting shared leadership; enforcing school polices, regulations, and procedures are effectively communicated and followed; ensure school-parent-community relationships.

School-Parent-Community Relations. Conducive-learning conditions and environment domain insists for the assurance of secured school environment free of any sort of threat, disciplined, and empowered students (i.e., students have developed a habit of taking responsibilities and leading a disciplined life, motivated to learn and actively participate in lessons) and fulfillment of facilities.

In effective schools, parents understand and support the basic mission of the school and given opportunities to play important roles in helping the school to achieve its mission (Leozotte, 2001:8). Accordingly, SIP in Ethiopia emphasizes the importance of collaborative work between school and the parents, the community and non-governmental organizations.

Thus, the schools are expected to build and maintain collaborative relationship with parents and the community.

Conducive-learning conditions and environment. In effective schools, there is an orderly, purposeful, business-like atmosphere, which is free from the threat of physical harm and the school climate is not oppressive and is conducive to teaching and learning (Lezotte, 1991). Lezotte maintains that schools need not only to eliminate “undesirable behavior” but also teaching students the necessary behaviors to make the school “safe and orderly. Accordingly, this domain of SIP in Ethiopia emphasizes the need to have school environment that is orderly, purposeful, free from any threat, and the development of positive school climate necessary for effective teaching-learning process. It insists for disciplined, and empowered students (i.e., students have developed a habit of taking responsibilities and leading a disciplined life, motivated to learn and actively participate in lessons) and fulfillment of facilities.

The new CPD policy for teachers (i.e., MoE, 2009) stipulates that “school Improvement Program should not be seen in isolation, but used together to provide a holistic approach to the improvement of learning and teaching in each institution.” (p. 14). It remarks that:

Each school is expected to identify its priorities for improvement in these domains and these will form the basis for its School Improvement Plan. These priorities will almost certainly include the need for continuous professional development, either at classroom or leadership level (p.14).

As stated in the document, each school must take part in planned CPD activities for a minimum of sixty hours per year, which will be allotted in response to the national, local, and institutional priorities. The document remarks that these sixty hours should flexibly used to address the various CPD priorities which impact on the work of the individual or institution (MoE, 2009: 26).

The CPD approach adopted by the institution should give formal opportunities for collaborative working – mentoring, coaching, experience sharing, team planning, peer observation, team teaching etc – which will have a significant and lasting impact on teacher improvement and student achievement (p.27).

Published studies on school capacity assessment for sustainable improvement were rare in Ethiopia. National level map capacity development design study (MoE, 2010b) and USAID/IQPEP (2012) SIP implementation impact assessment study were important ones to cite here.

USAID/IQPEP (2012) SIP implementation impact assessment study concluded that the lion's share of the intervention goes to the school environment domain more than the other domains both in budget and tangible improvements. In this study, the major suggestions for greater improvement and real success in student achievement were developing clear evaluation and monitoring mechanisms, adequate training on planning across the system, building the capacities of the local-level actors, leading and enforcing schools reporting on what is happening in the classroom without compromising the other domains, addressing shortages of learning materials, untimely distribution of materials, building teacher capacity, setting national and regional targets without compromising the local and school contexts (p. 9).

Map capacity development design study (MoE, 2010b) concluded that a major current capacity gap is the lack of impact assessment, other than small scale studies, in the absence of which evidence cannot be gathered to inform the formulation of the next GEQIP plan. To build management, planning and monitoring evaluation capacities critical for the achievement of ESDP and GEQIP goals, the study recommended: (i) develop a financial planning and management capacity of schools, (ii) develop human resource management and development systems that contribute to more capacitated, performance oriented and stable

organization; (ii) develop a results oriented planning system consistent with achieving ESDP IV targets; (iii) promote a culture of evidence based policy making at all levels by development of EMIS; (iv) build capacity to develop and implement systems for results oriented monitoring and evaluation; (v) develop capacity to manage examinations at federal and regional levels that are consistent with the learning objectives and methods in the national curriculum and new textbooks; (vi) strengthen the system of quality assurance as a means of contributing to better learning and school management.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This chapter treats the research paradigm underpinning the research methodology and the assumptions, the research method, sources of data, sample schools and their background, target population, the sample and the sampling techniques, methods and instruments of data collection, procedure of data collection, and methods of data analysis. Last, but not least, the chapter treats the ethical considerations to which the researcher “adhered to” during the research process and the research report.

3.1. Research Paradigm Underpinning the Research Methodology and the Assumptions

It is the pragmatic research paradigm that underpinned the methodology of this research. Pragmatic research paradigm applies to mixed methods research where inquirers draw liberally from both quantitative and qualitative assumptions when engaging in their research (Creswell, 2009). Pragmatic research paradigm believes in the importance of using mixed methods when the nature and the purpose of the research dictate for using mixed research method.

On the basis of the difference in their ontological and epistemological views, there had been two incommensurable research paradigms in social science until recently the quantitative methodology of the post positivists’ paradigm, and the qualitative methodology of the constructivist and interpretive paradigm. More recently, however, it is agreed that the monolithic framework of research method (either quantitative or qualitative method) has limitation for full understanding of the world around us. As a result, pragmatism research paradigm has been espoused among the research community (e.g., Creswell, 2012, 2009; Gorard, 2004; Hesse-Biber, 2010).

Pragmatist research paradigm is founded on pragmatist philosophy and world view (reality). Based on the writings of Biesta and Burbules (2003), Johnson and Christensen

(2012), Creswell (2009), Mertens (2010) about the philosophy (world view) of pragmatism for using mixed research method, the practicing researcher's basic assumptions are as follows.

First, the practicing researcher assumes that there is an external world (reality) independent of mind as well as that lodged in the mind (Biesta & Burbules, 2003; Johnson & Christensen, 2012; Creswell, 2009) and that it is not possible for the social science inquirer to access the "truth" about the real world solely through single scientific method (Biesta & Burbules, 2003; Mertens, 2010).

Second, the practicing researcher believes that metaphysical concepts that have caused much endless and often useless debate should not necessarily dictate the choice of research method (Biesta & Burbules, 2003). In choosing research method, a researcher should give a due concern to applications and warranted assertions—what works to understand and solve practical problems instead of concern to epistemology. That is, the researcher needs to emphasize the research problem and the use of multiple approaches available to understand and/or solve the problem (Creswell, 2009), or to justify the claim (Johnson & Christensen, 2012). That is, the practicing researcher believes that investigators should mix quantitative and qualitative methods when it deemed provide the best way of understanding or solving the research problem.

3.2. Research Method

This research employed mixed research method. In particular, it employed concurrent mixed method (Quan +Qual). The nature of the problem and the purpose of the research (as explained below) had necessitated the use of mixed research method design in this study.

From pragmatic stance, several scholars (e.g., Creswell, 2012; Gay, Mills, & Airasian, 2009) contend that mixed methods design is useful when either the quantitative or qualitative approach by itself is inadequate for the best understanding of the problem or, in other words,

when the strengths of both quantitative and qualitative research can provide the best understanding of the practical problem or serves the purpose of the research. In more specific expression, Mertens (2010:305) points out two common reasons that justify the choice of mixed methods design: the “multiple purposes” of the research (generalization, triangulation, deep understanding, allowing different perspectives and participant voices), and the “nature of the research questions.” For Mertens, triangulation, specifically method triangulation, seems to be the most commonly cited reason for mixing quantitative and qualitative methods into a single research. Triangulation fortifies and enriches a study’s conclusions, making them more acceptable to the advocates of the qualitative as well as the quantitative methods (Hesse-Biber, 2010: 26).

Thus, in this study, the rationale for choosing mixed method research in general and that of Quan +Qual concurrent mixed method in particular lies in four reasons. The first reason is situated in the purpose of the research, which was to assess and generalize. The second reason is related to the nature of the problem (comprises of several components of school capacity that require diverse sources of data). Better understanding of the status of each of the components of school capacity requires use of quantitative and qualitative methods. The third reason is the need for better validity and credibility of the findings and the conclusions of the study through integration and triangulation of results from quantitative and qualitative data. The fourth reason is related to the research questions. One of the basic research questions of the study deals with exploring the major challenges associated with ensuring sustainable school improvement. Addressing this question requires, to a large extent, qualitative data that is grounded in the live experiences of the people in a particular context rather than reliance on pre-determined set of questionnaire-based factors.

The practicing researcher believed that concurrent mixed research method (Quan +Qual) is the preferred type of the mixed research methods to serve the multiple intensions of this

research generalization, in-depth understanding, and credibility. In this regard, while the quantitative survey would help to measure and generalize the state of affairs in quantitative terms, the qualitative method (document analysis, interview, focus group discussion and observation) would help for corroboration, for in-depth description, and to add further insight and understanding of the state of affairs. To this effect, as Figure 3.1 below shows, the collection of the two sets of data was concurrent, but independent or separate (i.e., one does not depend on the result of the other); and the two sets of data were analyzed and integrated (combined) under their respective themes during data analysis and interpretation so as to come up with credible findings, conclusions, and recommendations.

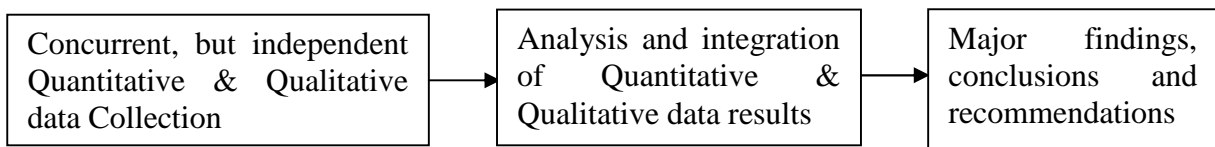


Figure 3.1: Concurrent Mixed Method (Quan +Qual)

3.3. Sources of Data

The primary sources of data were school principals, department heads, secondary school supervisors, teachers, PTAs, students, school improvement strategic and annual plan documents. The secondary sources of data include annual statistical abstracts of Ministry of Education; GEQIP documents (MoE, 2006a; MoE, 2008); SIP documents, which include SIP implementation guideline/handbook (MoE, 2006a; MoE, 2010c), revised SIP implementation guideline/manual (MoE, 2011); Government CPD Policy document for Primary and Secondary School Teachers, School Principals and Supervisors (i.e., MoE, 2009); SIP impact assessment documents (USAID/IQPEP, 2012, & MoE, 2010a); and National Professional Standards for Ethiopian School Principals (MoE, 2012).

3.4. Sample Schools

The target schools of the study were 12 secondary schools (Grades 9-10) of Oromia Regional State, which were recognized as model schools at regional level in their

implementation of SIP/GEQIP between the year 2007 and 2014. Eight (66.7%) of them were randomly selected as the sample schools of the study. They were (1) Dire Inchini Secondary School (West Shewa Zone); (2) Fittal Secondary School (North Shewa Zone), (3) Mesela Secondary School (West Harergie Zone), (4) Dimtu Secondary School (Jimma Zone), (5) Goba Secondary School (Bale Zone), (6) Arsi Negelle Secondary School (West Arsi Zone), (7) Chilalo Secondary School (Arsi Zone), and (8) Adama Secondary School (East Shewa Zone).

3.5. Background of the Sample Schools

The sample schools were embarked on the implementation of SIP/GEQIP in 2008/2009. In an attempt to communicating the essence of various domains of SIP, visual artifacts (e.g., posters, pictures, figures and formulas on the walls of classroom buildings, and departments were common in all sample schools. Besides, planed targets for improving student achievement (test score) both at Grade levels and at Grade 10 Nation Examination were the common element to all sample schools. The first four schools were in Rural District Towns, the fourth and the sixth were in Municipality Administrative Towns, whereas the seventh and eight were in big Administrative Towns. The brief background of each of the sample schools is as follows.

Dire Inchini Secondary School is in West Shewa Zone, 28 km south west of Ambo Town, which is 125 km west of Addis Ababa. It was established in 2003 (1995 E.C). In implementing SIP/GEQIP, the school was one of the model schools in 2014 and 2015 at regional level. In the past years (prior to 2010), perhaps due to political sensitivity of the students and/or the local community, student uprising had been common in the school. Sequel to this, it is known by its poor performance in student achievement. Thus, one of the remarkable achievements with the implementation of SIP include the pursuit of an orderly disciplinary school environment for teaching learning process through collaborative

leadership of school principals, PTA, teachers and students. Other achievements include the implementation of school-based CPD, collaborative work performance of teachers, the organization and learning of students in collaborative learning groups, improved library service, and a relatively better performance in student achievement. Student pass rate in Grade 10 National Examination was 53.80% in 2013, 64.16% in 2014, and 76.24% in 2015. In the respective years, the number of students who scored 4:00 was 2, 2, and 5 while the pass rate to Grade 11 was, 20.51%, 22.15%, and 34.77%.

Fittal Secondary School is in North Shewa Zone, Fittal Town at about 114 km north of Addis Ababa and 26 km from the Zonal Town - Fiche. Relative to other sample schools, it is of the smallest size in student enrollment. It was developed to secondary school level from primary school in 2004 (1996 E.C) upon the request by the local community. In implementation of SIP/GEQIP, it was one of the model schools at regional level in 2013 and 2014. In 2010, 2011, 2012, it was in the category of high performing school (model school) in implementing SIP/GEQIP at Zonal level. Nevertheless, this school was indeed at the lowest level in terms of the fulfillment of facilities such as library, laboratory, staff office, staff tearoom, and the adequacy of classrooms for teaching learning process. Currently, the construction of two up-to-standard lab buildings was underway by the financial contribution of the community. In addition, teachers' commitment in supporting students, active involvement of PTA in school management and the participation of parents/community in providing financial support to school are among the strong sides of this school. Student pass rate in Grade 10 National Examination was 80.52 in 2012, 85.54% in 2013, and 67.90% in 2014. In the respective years, the number of students who scored 4:00 was 4, 3, and 6, while the pass rate to Grade 11 was 53.79%, 64.45%, and 47.62% respectively..

Mesela Secondary School is in West Harargie Zone, Mesela Town, 327 km from Addis Ababa, and 69 km from the Zonal Town – Chiro Town. It became a model school at regional

level for three consecutive years - 2012, 2013, and 2014. As a result, it received a certificate for its performance from Ministry of Education in 2014. At Zonal level, it had been among high performance secondary schools in implementing SIP/GEQIP since 2010. Among the other sample schools, this school is serving in less favorable socio-cultural context to education. Student misbehavior, carelessness, absenteeism, low achievement, and dropouts had been the major problems to the school. Besides, the topography of the land (down a hill to school and up a hill to Town, or home) has been the challenge to students to come to school for tutorial classes, for library, for doing group assignments etc. To this connection, one remarkable achievement to improve student learning and learning condition was opening of library at the center of the town that gives service for students for 24 hours. Student pass rate in Grade 10 National Examination was 69.33% in 2012, 77.34 in 2013, 58.57 in 2014, and 67.75% in 2015. In the same years, the number of students who scored 4.00 was 1, 4, 8, and 8 respectively, while the pass rate to Grade 11 was 31.65%, 28.03%, 29.88%, and 28.87% respectively.

Dimtu Secondary School is in Jimma Zone, Dimtu Town, 65 km from Jimma Administrative Town, and 227 km from Addis Ababa. It was established in 1963 (1955 E.C) as primary school and developed to secondary school in 2004 (1996 E.C). It was in the category of high performing secondary schools in implementing SIP/GEQIP at Zonal level in 2012 and 2013. It became one of the model secondary schools at regional level in 2014. Its remarkable achievements include focus on student learning (support), implementation of school-based CPD, collaborative work performance of teachers, learning of students in collaborative learning groups, separate toilet for boys and girls, and improved student achievement since 2012. There had been quite remarkable surge in student pass rate in National Examination in relation to the previous three consecutive years, which was 26.57% in 2009, 20.41% in 2010, and 19.61%. Student pass rate in Grade 10 National Examination

was 50.0% in 2012, 80.30 % in 2013, 64.80 in 2014, and 67.75% in 2015. In the same years, the number of students who scored 4.00 was 2, 4, 1, and 2 respectively, while the pass rate to Grade 11 was 28.47%, 51.17%, 29.69%, and 16.49 % respectively.

Goba Secondary School is in Bale Zone, Goba Administrative Town, 445 km from Addis Ababa, and 15 km south of the Zonal Town – Robe Town. It was established as secondary school in 2003 (1995 E.C) from Primary School known as Negade-Sefer. In implementing SIP/GEQIP, it had been among “high performance schools (model school) at Zonal level since 2009. It was one of the model schools at regional level in 2009, 2011, and 2014. Its achievements include implementation of school-based CPD, students’ work in collaborative learning groups and the commitment of PTA to school management and improvement. It has seven hectares of farm land as the main source of internal income generation. Student pass rate at Grade 10 National Examination was 72.41% in 2012, 48.55% in 2013, 32.39% in 2014, and 83.31% in 2015. In the same years, the number of students who scored 4:00 in the examination was 10, 16, 20, and 20 respectively, while the pass rate to Grade 11 was 12.19%, 21.59%, 18.59,% and 65.15% respectively. It seems relatively better performance in national examination pass rate as compared to pass rates in the previous years (2009, 2010, 2011), which was 35.39%, 57.21%, and 63.66% respectively.

Arsi Negelle Secondary School is in West Arsi Zone, Arsi Negelle Administrative Town, which is 25 km North of Shashemene along the main road of Addis Ababa to Shashemene. First established as elementary school in 1956 (1948 E.C) and it became a secondary school (Negelle Secondary School) in 1982 (1974 E.C). It was among high performance schools (model school) in implementing SIP/GEQIP at Zonal level in 2009 and 2010 and it was one of the model schools at regional state level in 2011, 2012, 2013, and 20014. It has three hectares of farm land as the main source of internal income generation. It is one of the schools with large student enrollment – 5290 students in 2012, 5122 students in

2013, 4640 students in 2014, and 4435 students in 2015. Student pass rate at Grade 10 National Examination was 44.51% in 2012, 40.27% in 2013, 52.83% in 2014, and 54.27% in 2015. In the same years, the number of students who scored 4:00 was 6, 8, 14, and 4 respectively and the pass rate to Grade 11 was 19.47%, 10.91%, 22.50% and 17.73% respectively.

Chilalo Terara Secondary School is in Arsi Zone, Assella Town, 175 km from Addis Ababa. It is the oldest secondary school. It was developed to secondary school in 1954 (1946 E. C) from Ras-Dargie Primary School, which was established in 1949 (1941 E.C.) and was named Chilalo Terara Secondary School in 1981(1973 E.C). It is one of the schools with large number of student enrollments – 3135 students in 2012; 2035 students in 2013; 2694 students in 2014, 2339 students in 2015. In implementing SIP/GEQIP, it was model school in 2011 and 2012 from Assella Administrative Town. In 2013 and 2014, it was one of the model schools at regional level from Administrative Towns of the region. Student pass rate at Grade 10 National Examination was 55.60% in 2012, 56.04% in 2013. In the same years, the number of students who scored 4:00 was 19 and 17 respectively while the pass rate to Grade 11 was 28.90% and 26.07% respectively.

Adama Secondary School is in East Shewa Zone, Adama Administrative Town, 100km east of Addis Ababa. It is established in 1987 (1979 E.C). It is one of the schools with large number of student enrollments – 4195 in 2012, 4401 in 2013, 4210 in 2014 and 2988 in 2015. It was one of the model schools from Administrative Towns at regional in 2014 and 2015. It was the model (high performance) school from Administrative Town Government secondary schools in 2012 and 2013. Its remarkable achievements include improved library service with fulfilling references, improved laboratory service, focus on teaching learning process, coordinated and collaborative work performance, improved student disciplinary behavior.

Student pass rate in Grade 10 National Examination was 61.23% in 2004, 62.21% in 2012, 36.68% in 2014, and 51.67% in 2015.

3.6. Target Population, Samples and Sampling Techniques

The target populations of the study were teachers, school administrators (school principals; department heads), high school supervisors, students, and PTAs. Out of 446 teachers in the eight sample schools, 293 (65%) of teachers were randomly selected to form the sample of the study. On the other hand, all the 21 (100%) of school principals (including vices) and all the 68 (100%) department heads in the sample schools were taken as the sample of the study.

Out of 13, 341 students in the eight schools, a randomly selected 472 (3.5 %) students were the sample of the study. As a general principle of determining sample size, Gay et al. (2009) state that the larger the target population, the smaller the sample size required to get a representative sample; and beyond certain number, say 5000, population size is almost irrelevant and sample size of 400 is adequate. Therefore, it was believed that 3.5% (472) sample size of students from the total population of 13, 341 is representative.

Out of the total 13, 341 students, 7 219 (54.11%) were 9th grade students and the rest 6, 122 (45.88 %) were 10th grade students. Ensuring proportional representation of students from both grade levels is necessary. Thus, through equal proportional sampling (i.e. taking 3.5% of students from both grade levels), 256 (54.23 %) Grade 9 students and 216 (54.23 %) of Grade 10 students were randomly selected to form the total sample of students (i.e., 472 students). With regard to gender representation, nearly equal number of males and females from both grade levels is included in the sample.

It is apparent from the foregoing discussion that the sample size taken out of the total target population was 65% for teacher sample, 100% (all) for school principals and department heads, and 3.5% for the sample of students. Hence, the proportionality coefficient

for taking samples from schools is .65 (65 %) for teachers, 1 (100%) for school principals and department heads, and .035 (3.5 %) for students. Using these proportionality coefficients for taking samples from a school, Table 1 below provides the summary of the target population, total sample size, the samples and the sample size of the participants taken from each sample school.

Table 1: Target Population, Samples and Sample Size by School

Target Population	Sample Schools								
	D/Inc	Fit	Mes	Dim	Gob	A/Neg	Chil	Adam	Total
Total Teachers	52	24	44	39	52	58	76	101	446
• Sample Taken	34	16	29	26	34	38	50	66	293
Total School Principal	3	2	2	2	3	3	3	3	21
• Sample Taken	3	2	2	2	3	3	3	3	21
Total Department Heads	5	5	5	5	12	12	12	12	68
• Sample Taken	5	5	5	5	12	12	12	12	68
Total Grade 9 Students	963	420	679	518	721	1,270	1,250	1,408	7,219
• Sample Taken	34	16	24	18	25	45	44	50	256
Total Grade 10 Students	841	298	487	320	767	1,213	1,089	1,107	6,122
• Sample Taken	29	11	17	12	27	43	38	39	216
Total Student Population	1,804	718	1,166	838	1,438	2,433	2,339	2,515	13,341
• Total Sample	63	27	41	30	52	88	82	89	472

On the other hand, the informants for the qualitative method were 16 teachers (i.e., two from each of the eight sample schools), eight school principals (i.e., the head from each of the eight sample schools), eight Parent-Teacher-Association (PTA) members (i.e., one from each of the eight sample schools), eight student for focus group discussion (i.e., one from each of the eight sample schools), and eight high school supervisors (one from each of the eight education districts of the respective sample schools).

School principals and supervisors were taken automatically for sampling is not required. Nevertheless, purposive sampling method was employed for the selection of the rest groups

of participants teachers, students, and PTA members. The logic behind using purposive sampling lies in the need for obtaining information rich informants from whom the researcher can learn about the issue of central importance to the purpose of the research (Patton, 1990: 169). Purposeful sampling implies that the researcher intentionally select individuals to learn or understand the central phenomenon (Creswell, 2012).

Accordingly, two senior teachers, who have served for at least 3 years in the school and have been actively involved in school improvement endeavors of the school, were selected before distributing questionnaires to teachers and were not included in the sample of teachers for completing questionnaires. On the other hand, student focus group discussion (FGD) consisted of a minimum of seven students - two students from student council (the head and the vice; or the head or the vice and any other member), two class representatives and three any other students.

3.7. Methods and Procedures of Data Collection

Because the study employed mixed method design, it relied both on quantitative and qualitative data. Thus, the detail description of methods and procedures of the quantitative and the qualitative data collection is presented hereunder.

3.7.1. Instruments and Procedures of Quantitative Data Collection

3.7.1.1. Instruments of Quantitative Data Collection

Three different sets of close-ended questionnaires were employed to collect data from the aforementioned three groups of participants: (1) teachers (2) school administrators (principals and department heads); and (3) students. For all three sets of questionnaires, a five-point Likert Scale ranging from *strongly agree* (value = 5) to *strongly disagree* (value = 1) was employed.. A brief discussion of the preparation of each of these three sets of questionnaires is as follows.

A. Teacher questionnaire. Basically, questionnaire to collect data from teachers consisted of three parts (see Appendix A). The first part (i.e., Professional Learning Community (PLC) scale consists of 31 rating items that are intended to measure the extent to which the professional staff (i.e., the academic staff of the schools) works as collaborative, learning community of shared responsibility. The items were developed by adapting the concept of PLC in the literature (e.g., Harris & Muijs, 2005; Hord, 1997; Olivier & Huffman, 2008) to the context and framework of SIP in Ethiopia. For instance, in the literature the prime focus is on the learning and innovation/creativity of staff while collaborative culture is implicit and given less focus. In the context of this study, however, both the learning and collaborative practices of the staff were given attention. Besides, school-based CPD of teachers was included as one of the components of PLC scale.

The second part of teacher questionnaire (leadership scale) was prepared to measure teachers' perception of their school principal leadership practice in terms of four dimensions of leadership practices of successful school principals in ensuring sustainable school improvement: (1) Setting Direction, (2) Developing People, Re-designing the Organization, and (4) Managing the Teaching Learning Program. Rating items in each of the four dimensions were developed by adapting the literature to school leadership practices in the Ethiopian context. For instance, for some practices in the fourth dimension (e.g., staffing/recruitment and curriculum development) were not included for schools do not have a mandate for staffing (requirement) and curriculum development in the context of Ethiopia. The main literature sources for developing the scale include the meta-analysis of the practices of successful school principal by Leithwood and Jantzi (2005) and the subsequent research by Leithwood and Jantzi (2006), Day et al. (2011); and similar sources, such school leadership effect review by Leithwood, Harris and Hopkins (2008), Leithwood and Riehl (2005).

The third part of teacher questionnaire was the *shared leadership scale*. It consisted of items intended to measure the spirit and practice of shared leadership by teachers and students.

B. Questionnaire to School Principals and Department Heads. The questionnaire to school principals and department heads had five scales for measuring five areas of school capacity for sustainable improvement: (1) Strategic Planning Capacity, (2) Empowerment and engagement of Parents, especially PTA, (3) human resource capacity, especially the quality (competence and commitment) of teachers, (4) spirit and practices of shared leadership, and (5) financial source capacity. The five capacity areas were found in the literature as well as in the implementation framework and the standards of SIP in Ethiopia. This to say, the rating items of the scales were developed in view of the practices, expectations/standards of school improvement implementation framework/guidelines in Ethiopia as well as the literature.

C. Student questionnaire: Questionnaire to students had two scales. One is student empowerment scale and the other is student engagement scale, which consisted of three subscales for measuring three dimensions of student engagement: (1) behavioral engagement, (2) academic engagement, and (3) belongingness. Rating items in both scales were developed by adapting standards of student empowerment and student support in Ethiopian school improvement framework (Domain 4) to the underlying theoretical concept in the literature.

3.7.1.2. Procedure for Establishing Validity and Reliability of Questionnaires

The recent validity standards of measurement scale in education and Psychology lists three categories of evidences for establishing and/or evaluating the validity of score-based interpretations: *content related evidence*, *criterion related evidences*, and *construct related evidences* (e.g., Ary, Jacobs, & Sorensen, 2010: 26; Creswell, 2012).

In this study, two procedures *expert judgment* and *pilot test* were applied to establish content and construct validity of the data collection instruments so as to ensure the validity of score based interpretation the data.

A. ***Expert judgment.*** In developing the questionnaires, the construct and content related evidences were gathered from education experts and colleagues, who have ample knowledge in contemporary theories of school improvement, school leadership, and school improvement practice in Ethiopia. *Questionnaires to teachers* (Appendix A) and students (Appendix C) were given to eight experts. Five colleagues from School of Education Sciences and Technology Teacher Education, Adama Science and Technology University; and three experts of Zonal Education Bureau of East shewa Zone, Oromia Regional State. On the other hand, *questionnaire to school principals and department heads* (Appendix B) was given to eight informant individuals three from District Education Office of Adama Town, three colleagues in Adama Science and Technology University, School of Education, and two school principals in Government Secondary Schools in Adama-Town Administration.

First, the experts were asked to rate the relevance of each question item as 3 = very relevant; 2 = relevant; 1 = not relevant” with respect to the construct the scale/subscale it intended to measure. Secondly, they were asked to give any sort of suggestion on the clarity of question items and the design of the questionnaire.

In all of the three sets of questionnaires, the overwhelming majority of the items were rated “very relevant” and the content of the scales and the subscales were rated “comprehensive”. The total rating score of the items in “teacher questionnaire” were between 21 and 24 (mean = between 2.6 and 3.00), and that of “student questionnaire” were between 20 and 24 (mean = 2.5 and 3.00). Similarly, the total rating score of the items for questionnaire administered to school administrators (school principals and department heads) were between 23 and 24 (mean = 2.87 and 3.00.). The comments of the experts (in written

form and in face-to-face information by some informants) include, lengthy statement, overlapping of some rating items in professional learning community scale with the leadership scales, double barreled questions and lengthy questionnaire. Thus, by making the necessary improvements to the items and subscales of the questionnaires based on the experts' comments and the rating responses, the final questionnaires were prepared and administered for pilot testing.

B. Pilot test. The pilot test of the questionnaires was made on one model secondary schools in Oromia Regional State; namely, Shashemene Secondary School (West Arsi Zone). The three sets of questionnaires (teacher questionnaire, school administrator questionnaire and student questionnaire) were distributed to the respective groups of respondents, specifically to 25 teachers, 15 school administrators (school principals and department heads), and 40 students. On the empty space provided at the end of the questionnaires, the raters were asked to comment on the clarity of items, the relevance of questions to school improvement practices, the design of the questionnaire and any other comments. A total of 22 questionnaires were correctly completed and returned from teachers, 14 from school administrators, and 38 from students.

After collecting the questionnaires, the practicing researcher read the comments, checked the responses item-by-item looking for items without responses as well as responses that suggest misinterpretation of questions or response bias. At the same time, analyses of the internal consistency (reliability) of the scales of the questionnaires were made, which is described below. Finally, the final form of the questionnaires, which were further improved in design and the clarity of question items, were administered to collect data for the research.

3.7.1. 3. Validity and Reliability of Questionnaires

The ideal situation of validity of a measuring instrument exists when scores from the instrument are both reliable and valid (Ary et al., 2010). Ary et al., 2010) further pointed out,

analyzing the internal structure of a measurement scale is important source of evidence that the scale is measuring the construct it is supposed to be measuring. This procedure involves showing that all the items making up the scale are measuring the same thing—that is, that the test has internal consistency (reliability).

In this research, therefore, Cronbach alpha was employed for the analysis of the internal consistency (reliability) of the scales in the questionnaires. Both at the pilot test stage, and in the final data collected for analysis, Cronbach alpha values of all the three sets of questionnaires were found exceeding the standard cut-off point for internal consistency of a measurement scale in the literature (i.e., Cronbach alpha = .7).

At the pilot test stage, Cronbach alpha of PLC scale was .93; the leadership scale was .95 and that of the shared leadership scale was .96. In the final data collected for the research, it was found to be .95 for professional learning community scale, .97 for leadership practice scale and .90 for shared leadership scale. Indeed, Cronbach alpha values of the subscales of the professional community scale and leadership scale exceed .70, which is often regarded in the literature as the lowest acceptable cut-off point for internal consistency of data collection instrument.

Second, for questionnaire to school administrators Cronbach alpha of strategic planning capacity scale was .79; parent/community empowerment and engagement scale was .81; and human resources capacity scale was .74 at the pilot test stage. In the final data collected for the research, it was found to be .82 for strategic planning capacity; .85 for parent/community empowerment and engagement; and .78 for human resources capacity scale.

Third, for student questionnaire, Cronbach alpha of student empowerment scale was .78; student engagement scale was .77 at the pilot test stage. In the final data collected for the research, it was found to be .81 for student empowerment scale; .83 for student engagement scale.

High Cronbach alpha of the scales reveals that the scales measure one underlying construct in their respective area. For instance, the high alpha value (.95) of the internal consistency of PLC scale reveals that the scale measures one underlying construct which is the academic staff of the schools performing as collaborative, professional learning community of collective responsibility in this case. Similarly, the high alpha value of internal consistency of school leadership practice scale (.97) reveals that the scale measures one underlying construct which is, in this case, the leadership practices of school principals.

3.7.1.4. Procedure of Quantitative Data Collection

As part of the procedure for informed consent to collect data from schools, a letter of cooperation to the sample schools was taken from Oromia Education Bureau. In each sample schools, the number of questionnaires to the respective sample groups of respondents was determined through proportional allocation. In collaboration with the school principals, and/or unit leaders, the practitioner himself distributed the questionnaires to the respondents craving for their authentic co-operation to ensure the maximum rate of questionnaire return.

In all schools, the respondent teachers and students for completing questionnaires were randomly selected. Student respondents were completed the questionnaires under the supervision of the researcher in collaboration with school principal/unit leader in a classroom. Telling them the purpose of the research, the students were requested to honestly complete the questionnaire with care and understanding. They were told to ask any thing that is not clear in completing the questionnaires, to rate each item with understanding, and to check that they responded without skipping items on each of the pages.

Out of 293 questionnaires distributed to teachers, 286 (97.61%) questionnaires were properly completed and returned; and out of 68 questionnaires distributed to department heads, 67 (98.53%) questionnaires were properly completed and returned. On the other hand,

all (100%) of the questionnaires distributed to school principals and students were properly completed and returned.

After defining (coding) the variables and assigning consecutive ID numbers (starting from one) to the questionnaires (cases), the data were entered SPSS-20 for analysis. Each variable in the questionnaires were coded in a way that uniquely describes that variable from other variables, and locates the subscale of the variable.

3.7.2. Methods and Procedures of Qualitative Data Collection

In this study, the methods of qualitative data collection were interview, focus group discussion (FGD), observation, and document analysis. The description of each of these methods and the procedure is presented below in detail.

A. Interview. Among other types of interview, interview guide was used in this study in order to focus the interview on issues relevant to the research questions (Cohen, Manion, & Morrison, 2007; Johnson & Christensen, 2012). The strength of interview guide is that the outline of broad interview areas and the respective focal issues increase the comprehensiveness of the relevant data to answer the research questions and it makes data collection somewhat systematic for each respondent, and logical gaps in data can be probed making the interviews fairly conversational and situational (Patton, 1990: 283).

Pertinent individuals were identified on the basis of the aforementioned criteria for selecting the informants. The informants were contacted through the help of school principals. By telling the purpose of the research, the participants were kindly requested to cooperate for interview. The researcher assured the participants his ethical commitment in assuring the confidentiality of the participants' responses during the research process, as well as during the research report. Interview guides being prepared (Appendix D, E, & F) were given to the respective interview participants to elucidate the content of the interview guide to

the respective participants and to help them adequately respond to the interview questions as well as to probing questions.

Time was scheduled with the participants and face-to-face interviews were conducted by the researcher himself in places free from distractions, such as in offices, classrooms, or open spaces in the school compound. Before the interview starts, the researcher was used to recapitulate the purpose of the research, re-explain the contents of interview, and the confidentiality of responses to an interviewee as a way of encouraging them to express opinion freely. For effective and efficient communication, interviews were made in one of the two languages that the participants can speak efficiently either Amharic language, which is the national official language of the country, or Afan Oromo, which is the official language of Oromia National Regional State. The choice between the languages for the interview was made by the interview participant himself/herself, depending on his/her personal preference. The interview took from one hour to one hour and half for teachers and school principals, from 50 minutes to one hour for supervisors, from 30 minutes to 50 minutes for PTAs.

i. Interview transcription procedure. In schools where the individuals were comfortable with audio-recording, the interviews were recorded (e.g. School 4, 5, 6, 7, & 8). In both cases (whether recorded or not), the researcher used to make hand written transcription of the interview while interviewing. As much as possible, the transcription was carried out in the words, phrases and/or statements of the interviewee. Attention was given for taking memos of unexpected responses and posing probing questions for further elaboration of the issue while interviewing the informants. Soon after the completion of an interview with a participant, the “writing-up” of the transcript followed. At this stage, the full transcribed form of the interview was made by transforming the abbreviations and short hand nations into full words and/or statements. At the same time, memos of unexpected responses to emergent probing questions were integrated into the full transcriptions.

ii. Management of interview transcripts. Upon completing the write-up, the written-up transcript was filled into the folder prepared for filing field transcripts of the different groups of participants. Such folders include teachers' interview transcript folder, school principals' interview transcript folder, supervisors' interview transcript folder, PTA interview folder.

B. Focus Group Discussion (FGD). FGD method was employed to collect qualitative data from students, which represents the group members' shared understanding (consensus) on a particular issue of discussion, while at the same time attention was given to different views of individuals. A purposefully selected seven students were included in FGDs at each school. These were two students from student council (the head and the vice, or the head/vice and any other member), two class representatives, and three any other informant students. The practicing believed that the student composition in the FGDs was involved key informants of different points of view for interactive discussion. Students included in the FGDs were not included in sample of students for completing questionnaire.

Structured-interview questions were used to guide the FGDs. The interview questions were prepared in a way that enables the discussion to focus on important issues, yet allowing for flexibility in responding to group-initiated concerns (see Appendix-G). In particular, it consisted of seven discussion guide questions that were focused on student empowerment and engagement. The selections of the students, time schedule, and the places for FGDs were done with the help of vice principals, or unit leaders.

The FGDs were guided by the practicing researcher in places free from disruptive noises, movements, and allows the participants feel free to speak. In all schools, the practicing researcher was used to introduce himself to the students, sincerely told them the purpose of the research, and assured them the confidentiality of their responses and the anonymity of the respondents. He guided the discussion by raising and explaining the

discussion questions one by one, posing probing questions as needed, and arriving at conclusive statement with regard to each discussion question.

While guiding the FGDs, the practicing researcher himself was used to take the opinions or views in the participant's word. For each discussion question, the write-up of the transcript was done on a separate A-4 size paper with codes at the top. In schools where the participants were comfortable with audio-recording, the interviews were recorded (e.g. School 4, 5, 6, 7, & 8). The FGDs took from 50 minutes to one hour and half, depending on the degree of interactive discussions by and among the participants. Soon after the completion of the FGD, the "writing-up" of the transcript followed. Upon completing the write-up, the transcript was filled into FGDs transcript folder.

C. Observation. Often because of incongruence between personal attitudes and behaviors, it is important to substantiate self-report data (Johnson & Christensen, 2012). On the other hand, Patton (1990) points out that observation enables researchers to see things that might otherwise be unconsciously missed, to discover things that participants might not freely talk about in interview situations, to move beyond perception based data (e.g. opinions in interviews).

Accordingly, in this concurrent mixed design, observation data were used to enrich and supplement qualitative data collected through interview and FGDs with students regarding school physical facilities and infrastructures. Expressed specifically, observation was used to collect data on the availability, adequacy, and quality of school physical facilities for teachers, students, and the teaching learning process. To this effect, semi-structured qualitative observation was used to collect data on three thematic areas (see Appendix-H). Unlike standardized quantitative observation checklist or rating, semi-structured qualitative observation employs open-ended qualitative statements about the phenomenon of observation

because it is presumed that the observer is the expert who knows what important specifics to check for.

The observation was done by practicing researcher in each of the sample schools using observation guide (Appendix-H). As shown in Appendix-H, the observation was focused on five thematic areas, each consisting of two or more focal aspects for observation. They were (i) the availability and quality of facilities and services for teaching learning process; (ii) the availability and adequacy of school facilities for students; (iii) the availability and adequacy of staff facilities; (iv) the availability of administrative facilities; and (v) the of conditions of school compound (e.g., beautification and cleanness, sport fields, garden trees).

Upon the consent from school principals, visual data through video camera were taken for cross reference to the observation notes of the phenomenon of observation, as well as to provide additional detailed information for analysis. In each school, the observation was done with the help of school principals, department heads or unit leaders in showing the observer the objects of observation (e.g., library, laboratories, ICT rooms, staff rooms etc).

D. Document Analysis. Apart from interviews, document analysis was employed as an important source of qualitative data for assessing the planning capacity of the schools. This is because, as opposed to participants' perceptual data (i.e., interview), document analysis allows assessing the planning capacity of schools on the basis of factual data. Document analysis was therefore intended to corroborate and validate the interview data on the basis of factual data and the practicing researcher's substantive knowledge (from practice and the literature) about the qualities of good school improvement plan.

School improvement strategic plans of 2013/14-2016/17 (2006-2008 E.C) and the yearly (annual) operational plan of the year 2014/15 (2007 E.C) were the documents for analysis. The analysis involves identifying strengths and weakness of the plan documents as viewed from the qualities of school improvement plan in the literature. Thus, the method of

document analysis in this study was descriptive qualitative analysis as opposed to text-segment-based quantitative content analysis. The analysis was done under four broad thematic areas. These were (i) how well the school improvement strategic plan documents are comprehensive, concise, and presented in logical coherence; (ii) how well the school improvement strategic plans are evidence-based; (iii) how well the school improvement strategic plans are SMART and (iv) how well the school improvement yearly (annual) operational plans are SMART.

Each of these four broad thematic areas was consisted of two or more sub-themes each with two or more specific focal aspects of analysis (see Appendix-H). For instance, the third area of analysis (i.e., how well school improvement strategic plans are SMART), encompassed two major themes or areas of analysis: (i) goals/objectives/targets, and (ii) strategy (action/activity plan) for achieving goals/objectives/targets. In turn, both of these major themes have several specific aspects for analysis. Respectively, these are (i) the extent to which the goals/objectives/targets of the plan are specific, measurable, achievable, relevant, time-bound; and (ii) the extent to which the plans involved specific actions/activities and indicators of practice/success to achieve the goals/objectives/targets, the sequence of actions/activities (action/activity) schedule, sources of finance/budget, and the implementing bodies are clearly indicated. Corresponding to these thematic areas, the quality (strengths and weakness) of school improvement plan documents was analyzed qualitatively. The themes emerged as strengths and weaknesses were identified. Whenever possible, texts from the documents were cited to substantiate the qualitative analysis.

3.7.3. Transcript Codes

As part of ethical concern, the transcripts of interviews and FGDs were carefully coded to ensure the anonymity of the participants. The detail description of transcript codes for different groups of interview and FGD participants is as follows.

i. Teachers' interview transcript codes: Interview guide for teacher participants (code T1, T2, T3.....T16) had four broad interview areas/parts (see Appendix-D): (i) about school principal leadership practice (SPLP), (ii) about staff performance/live experience as professional learning community (PLC), (iii) about student empowerment and engagement (SEE), (iii) Personal perspective questions about school capacity and problems/challenges (PCH).

The first part of the interview area (school principal leadership practice) had two areas: (i) the general open question to explore teachers' perspective about "effective school principal leadership practices" (coded as SPLP-P); and (ii) seven semi-structured items regarding the leadership practices of school principal, which were respectively coded as SPLP-PR-1; SPLP-PR-2 SPLP-PR-3; SPLP-PR-4; SPLP-PR-5, SPL-PR-6, SLP-PR-7, and SPLP-PR-7. The second part of interview area (staff performance with a sense of PLC) had seven interview items that deals with eight broad issues: (i) shared vision, mission and values (coded as PLC-SV); (ii) collaborative culture (coded as PLC-CC); (iii) collective/collaborative learning (coded as PLC-CL); (iv) shared personal practice (PLC-SPP); (v) supportive conditions-relationships (coded as PLC-SC-RP); (vi) supportive conditions-structures (coded as PLC-SC-ST); (vii) school-based continuous professional development practice (coded as PLC-CPD); and (viii) teachers' commitment/devotion for sustainable school improvement (coded as PLC-TCM). The third broad area had three questions about student empowerment and engagement (coded as SEE-1; SEE-2; and SEE-3). The fourth broad area of interview had two open questions: (i) teachers' perspectives/views about elements of capacity for sustainable school improvement (coded as VCP); and (ii) the major problems/challenges (coded as PCH) facing schools for sustainable school improvement.

ii. School principals' interview transcript codes. Interview guide questions to school

principals (P1, P2...P8) were focused on three broad areas/parts (see Appendix-E). Part one had two items about planning capacity of school (coded as PC-1, PC-2) and one question about the resource capacity of schools (coded as RC). Part two had the aforementioned seven items about staff performance as PLC (coded PLC-SV; PLC-CC; PLC-CL; PLC-SPP; PLC-SC-RP; PLC-SC-ST; PLC-CPD; PLC-TCM). Part three had three question items. One is about the commitment of PTA (coded as PTA-CM) and the other two questions about student empowerment and engagement (coded as SEE-1, SEE-2). Part four had two open questions: (i) personal perspective/view of the elements of capacity for sustainable school improvement (coded as VCP); and (ii) the major problems/challenges (coded as PCH) for sustainable school improvement.

iii. *School supervisors' interview transcript codes.* Interview guide for school supervisor (SP1, SP2...SP8) were focused on four areas (see Appendix-F, Part-I): (i) two items about planning capacity of school (coded as PC-1, PC-2); (ii) the resource capacity of schools (coded as RC); (iii) school-based continuous professional development practice of teachers (coded as PLC-CPD); (iv) teachers' commitment/devotion for sustainable school improvement (coded as PLC-TCM), (v) major problems/challenges for sustainable school improvement (coded as PCH).

iv. *PTAs' interview transcript codes.* PTAs' interview guide (see Appendix-F, Part-II) consisted of six interview questions that were mainly focused on PTA commitment to school improvement (coded as PTA-CM-1, PTA-CM-2 . . . PTA-CM-6).

vi. *FGDs' interview guide transcript codes.* Interview guide questions for student FGDs ((FGD₁; FGD₂ . . . FGD₈) were focused on student empowerment and engagement (SEE). See Appendix-G. It consisted of seven interview questions that were coded as SEE-1, SEE-2, SEE-3 . . . SEE-7. Thus, corresponding to each question item, FGD-1 was code for FGD at School 1; FGD-2 was transcript code for FGD at School 1; FGD-3 for School 3, and so on.

Table 2 below portrays a summary of areas of interview questions for the five groups of participants, the interview transcript codes, and the corresponding basic research question to address.

Table 2: Areas of Interview and Interview-Transcript Codes by Groups of Participants and the Research Question to Address

Participants and Codes	Major Interview Guide Area and the Code	Codes for Interview Question Items	Research Question to Answer
Teachers (T1,T2, T3...T16)	Teachers' perspective of School principal leadership practices (SPLP-P)	SPLP-P	Three
	School Principal Leadership Practices (SPLP-PR)	SPLP-PR-1; SPLP-PR-2; SPLP-PR-3; SPLP-PR-4; SPLP-PR-5, ... SPLP-PR-7	
	Teachers Performance as Professional Learning Community (PLC)	PLC-SV; PLC-CC; PLC-CL; PLC-SPP; PLC-SC-RP; PLC-SC-ST; PLC-CPD; PLC-TCM	Two
	Student Empowerment and Engagement (SEE)	SEE-1; SEE-2; SEE-3	Four
	Personal view of the elements of school Capacity (VCP) and Problems/Challenges (PCH) for sustainable improvement	VCP, PCH	Six
School Principals (P ₁ , P ₂ , P ₃ , ...P ₈)	Planning Capacity (PC) of school	PC-1; PC-2	One
	Resources Capacity (RC) of school	RC	Five
	Staff performance as PLC	PLC-SL; PLC-SV; PLC-CC; PLC-CL; PLC-SC-RP; PLC-SC-ST; PLC-CPD; PLC-TCM	Two
	PTA engagement/commitment (PTA-CM)	PTA-CM,	Four
	Student Empowerment (SEE)	SEE-1; SEE-2	
	Personal view of the elements of school capacity (VCP) Problems/challenges (PCH) for sustainable improvement	VCP, PCH	Six
Supervisors (SP ₁ , SP ₂ , SP ₃ , ... SP ₈)	Planning capacity (PC)	PC-1, PC-2	One
	Resources capacity (RC)	RC	Five
	School-based CPD (PLC-CPD)	PLC-CPD	Two
	Teachers' commitment/devotion (PLC-TCM)	PLC-TCM	
	Major Problems/Challenges (PCH) for sustainable school improvement	PCH	Six
PTA members (PTA ₁ , PTA ₂ , ... PTA ₆)	PTA commitment (PTA-CM)	PTA-CM-1; PTA-CM-2; PTA-CM-3 . . . PTA-CM-6	Four
Students (FGD ₁ , FGD ₂ , ...FGD ₈)	Student Empowerment and Engagement (SEE)	SEE-1; SEE-2; SEE-3; SEE-4,...SEE-7	Four

The interview/FGD transcripts were done on A-4 size paper with a unique code at the top of the page, which comprised of the school code, the participant code, and the interview/FGDs question code. As such, the interview transcript codes for items in interviews and FGD guides were so specific that it is precisely possible to trace any misplaced or mixed transcripts to an interview participant or FGD, and to the question item. For instance, as it can be inferred from Table 2 above, an interview transcript with a code of “T1-SPLP-PR-1” denotes the interview held with teacher one (T1) for his/her responses to school principal leadership practice question item No.1 (i.e., SPLP-PR-1 in Table 2). Similarly, “T2-SPLP-PR-1” denotes the interview transcript code of teacher two (T2) for his/her responses to school principal leadership practice question item No.1. Whereas, “P1-PC-1” stands for interview transcript of school principal one (P1) for his/her response to planning capacity (PC) question No.1. On the other hand, “FGD1-SEE-1” denotes transcript code for student FGD at School 1 for FGD discussion guide question No. 1 (SEE-1).

3.8. Methods of Data Analysis and Interpretation

The analysis, integration, and interpretation of the quantitative and qualitative data were carried out under the six basic questions of the research. Both the quantitative and qualitative data had equal weight in addressing the research questions. The analysis and interpretation of data involved the use of various tools of quantitative data analysis and analytical tools of qualitative data analysis as described below.

3.8.1. Method and Instruments of Quantitative Data Analysis

After defining (coding) the variables and assigning ID numbers to the questionnaires (cases), the data were entered SPSS-20 for analysis. Each variable in the questionnaires were defined (coded) in a way that uniquely describes that variable from other variables and locates the subscale of the variable.

After entering the data in SPSS-20 and editing for accuracy, Exploratory Principal Factor Analysis (EPFA) was applied to enable better organization and analysis of data. First, EPFA helps to organize question items in a data collection scale into subcomponents for better analysis and interpretation of the data. Second, it legitimates the analysis and interpretation of data using the total scores and/or cumulative mean scores. For this effect, the components were extracted at the default value of SPSS-20 for EPFA (i.e., Eigen values greater than one); and the components were retained as long as the factor solution was optimal. However, when the default value was not optimal, “reduction” of the components and/or “omitting” one or two items with smallest commonalities was attempted to get optimal factor solution. The brief description of the outcome (result) of the EPFA for each of the data collection scales and the subscales was provided along with the presentation and analysis of the data in Chapter Four; and the detail statistical information was annexed in the reference section of the research report.

Percentages were used for analyzing the demographic characteristics of the respondents. For the analysis of data about school capacity various descriptive and inferential statistics were applied at $\alpha = 0.05$. Mean score and standard deviations were the main descriptive statistics being used. On the other hand, inferential statistics (namely, Independent Sample *t* test, Mann-Whitney U test, and one-way ANOVA) were used for comparison of responses of groups. For significant *P* values in group comparison, eta-squared (η^2) values were used to indicate the strength of the difference between the groups' responses.

Prior to using parametric tests (i.e., independent sample *t* test, or one-way ANOVA), the nature of the distribution of data was examined for meeting the assumptions of parametric tests. An alternative non-parametric test (e.g., Mann-Whitney U test as non-parametric alternative for Independent Sample *t* test) was applied when the nature of the data and/or its distribution violated the assumptions of parametric tests. To this end, Histogram plots, and the

Normal as well as the detrended Normal Q-Q Plots were applied to evaluate the normality of the distributions of the data; whereas, P-P box plots were employed to inspect and identify extreme outliers.

As pointed out earlier, for assessing/evaluating school capacity the quantitative data were collected through Likert Scale. Thus, in assessing/evaluating capacity of schools with respect to various capacity dimensions and the subcomponents/subscales, “aggregate (cumulative) mean score of Likert Scale items were used. Accordingly, aggregate (cumulative) mean score values ranging from:

- 1.00–1.50 were interpreted as very poor, very inadequate, very dissatisfactory;
- 1.51 – 2.50 were interpreted as poor, inadequate, or dissatisfactory;
- 2.51 – 3.50 were interpreted as undecided, neutral, or neither...nor...;
- 3.51–4.50 were interpreted as good, adequate, or satisfactory;
- 4.51 – 5.00 were interpreted as very good, very adequate, or very satisfactory.

Whereas, for item-based analysis, mean score values from 1.00–1.50 were interpreted as strongly disagreed, from 1.51 – 2.50 as disagreed, from 2.51–3.50 as neutral, neither...nor..., from 3.51 – 4.50 as agreed/asserted/contended/believed, and from 4.51 – 5.00 as strongly agreed/strongly believed.

3.8.2. Method of Qualitative Data Analysis

There is no absolute rule for analyzing qualitative data (Cohen et al., 2007; Patton, 1990) except to do the best with a full intellect of the researcher to fairly represent the data and communicate what the data reveal given the purpose of the study (Patton, 1990). Nevertheless, there are some procedural guidelines of qualitative data analysis offered by researchers in this area (e.g., Auerbach & Silverstein, 2006; Creswell, 2012; Dey, 1993; Miles & Huberman, 1994). It is apparent in the literature that a typical qualitative data analysis involves an inductive process of data reduction, which involves the process of

selecting, focusing, simplifying, abstracting, and transforming the data that appear in the written-up field notes or transcriptions (Miles & Huberman, 1994: 10).

In this study, the interview and FGD transcripts were entered into excel Microsoft spread sheet in order to facilitate data abstraction and reduction/categorizing into themes through easier way of reading by scrolling within and across cases. To this effect, the interview question items (in code) were arranged along horizontal bar and the cases (participants in code) along vertical bar so that the interface cell of the excel spreadsheet contains the data transcription in English Language. First, through within-case reading, interview transcripts in the participants' language were translated into English Language, At this stage, the summary notes (data chunks) of interview transcripts were marked in the excel spread-sheet interface cell and the tentative labels were marked in the right margin of the spread sheet interface cell. The second level labeling was done through re-organization of the first level bits of information and/or data chunks into themes. A theme is an implicit topic that organizes a group of repeating ideas into one underlying concept or construct.

As mentioned earlier, the method of document analysis was qualitative under four thematic areas, each with two or more specific focal issues of analysis. Corresponding to these thematic areas, the strengths and weaknesses of the plans were qualitatively described. The themes emerged as strengths and weaknesses were identified. In the analysis, as much as possible, texts from the documents were cited to substantiate the analysis in the respective thematic areas of the analysis. Similarly, the method of analysis of observation data was qualitative under the five thematic areas of observation mentioned above and integrated with quantitative data in the respective basic research question.

Pulling the quantitative and qualitative data with respect to the research questions was the common focal point for integrating and analyzing the quantitative and qualitative data. The quantitative and qualitative data were pulled together under the respective research

question; and the convergence of the two sets of data, and a further insight obtained from the qualitative data was discussed descriptively. To this effect, there was a degree of systematization in that the numerical data for a particular research question was presented first followed by the qualitative data so that the convergence and the additional insight/s from the qualitative data is/are easily understandable and easily grasped to come to the major findings of the study.

3.9. Ethical Considerations

Often, education researchers need to abide by the principle of informed consent and the anonymity of the participants (Gay et al., 2009; Scott & Morrison, 2006). First, it is necessary to be sensitive to the potential harm that participants may experience because of their participation in the research (Gay et al., 2009; Cohen et al., 2007; Creswell, 2012). Second, it is important to protect the privacy of the participants (Cohen et al., 2007; Johnson & Christensen, 2012). The essence of anonymity is that information provided by participants should, in no way, reveal their identity (Cohen et al., 2007; Creswell, 2012).

In this research, therefore, the researcher informed the participants the purpose of the research and the researchers' ethical concern for keeping the anonymity of the participants. Accordingly, the participants participate in the research on the basis of their willingness and interest to contribute to the study and to help the researcher to achieve the purpose of the study. To meet the ethical concern for the anonymity of the participants, the researcher used various anonymity devices. This involves, among others, keeping the data confidential and using codes instead of using names of the participants in data collection, data analysis, and in the research report.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This chapter presents the analysis and interpretation of data. First, it presents respondents' demographic characteristics. Next, it treats the analysis and interpretation of data.

4.1. Demographic Characteristics of the Respondents

Three categories of respondents were the sources of the quantitative data teachers, school administrators (school principals and department heads), and students. The demographic characteristics of each of these three categories of respondents are presented respectively in the following three consecutive tables (Table 3, Table 4, and Table 5).

Table 3 below depicts the demographic characteristics of academic staff respondents (teachers and school administrators) by age, sex and academic qualification. As shown in the table, out of 286 respondent teachers, 78.7% (225) were males and 21.3% (61) were females. Out of 88 respondent administrators, 90.9% (80) were males. Only 9.2% (8) of the school administrator respondents were females. In fact, there was no a female respondent who assumed the position of school principal. The 9.1% (8) respondent females in the administrative position were those who assumed department head positions. The overwhelming majority of the academic staff respondents were males because there were only a small number of female teachers in secondary schools in Ethiopia as compared to male teachers.

With regard to age, more than half of respondent teachers, 50.7% (145), were in the "young" age group (20 to 30 years), and 21% (60) of them were in the "medium" age group (31 to 40 years), and the remaining 28.3% (81) were in the "older" age group (above 40 years of age). On the other hand, the overwhelming majority, 64.8% (57), of respondent school administrators were in the age group of 26 to 40 years, while 30.7% (27) of them were above

40 years of age. Only 4.5% (4) of them were in the “youngest” age group (20 to 25 years of age).

Table 3: Academic Staff Respondents by Sex, Age, and Qualification

Items		Teachers			School Administrators (SPs ^a & DHs ^b)		
		No.	%	Cum%	No.	%	Cum%
Sex	Male	225	78.7	78.7	80	90.9	90.9
	Female	61	21.3	100	8	9.1	100.0
	Total	286	100.0		88	100.0	
Age in Year	20-25	50	17.5	17.5	4	4.5	4.5
	26-30	95	33.2	50.7	27	30.7	35.2
	31-35	35	12.2	62.9	16	18.2	53.4
	36-40	25	8.7	71.7	14	15.9	69.3
	Above 40	81	28.3	100.0	27	30.7	100.0
	Total	286	100.0		88	100.0	
Academic Qualification	Diploma	16	5.6	5.6			
	BA/BSc/Bed	265	92.7	98.3	81	92.0	92.0
	MA/MSc	5	1.7	100	7	8.0	100.0
	Other						
	Total	286	100.0		88	100.0	

Note. SPs^a = School Principals (N = 21); DHs^b = Department Heads (N = 67); Cum% = Cumulative Frequency percentage.

In terms of academic qualification, the vast majority of respondent teachers, 92.7% (265), had the required minimum qualification of BA/BSc/BEEd degree as per the standard in Ethiopia. In fact, a few respondent teachers (5.6%) were under qualified, especially in the department of Information Technology Education (ICT). On the other hand, all respondent department heads had BA/BSc/BEEd degree and 38.09% of the school principals (7 out of 21) had MA/MSc degree. In particular, 5 out of 8 school principals/school-heads had MA degree.

Table 4: Academic Staff Respondents by Years of Service and Career Stage

Items		Teachers			School Administrators					
		No.	%	Cum%	SPs ^a		DHs ^b		Total	
No.	%				No.	%	No.	%	No.	%
Total	1-2	44	15.4	15.4			2	3.0	2	2.3
Service year	3-5	53	18.5	33.9			8	11.9	8	9.1
	6-9	48	16.8	50.7	7	33.4	14	20.9	21	23.9
	10-15	39	13.6	64.3	12	57.1	9	13.4	21	23.9
	> 15	102	35.7	100	2	9.5	34	50.7	36	40.9
	Total	286	100		21	100	67	100	88	100
Service year in the school	1-2	96	33.6	33.6			9	13.4	9	10.2
	3-5	80	28	61.5	8	38.1	13	19.4	21	23.9
	6-9	43	15	76.6	13	61.9	27	40.3	40	45.5
	10-15	31	10.8	87.4			7	10.4	7	8.0
	> 15	36	12.6	100			11	16.4	11	12.5
Total	286	100		21	100	67	100	88	100	
Career Stage	Beginner	59	20.6	20.6						
	Junior	37	12.9	33.6						
	Teacher	51	17.8	51.4						
	Higher	34	11.9	63.3						
	Associate L.	31	10.8	74.1						
	Lead	66	23.1	97.2						
	Higher Lead	8	2.8	100						
Total	286	100								
Service in current position in the school	1 year						22	32.8	22	25
	2-3 year				3	14.3	21	31.4	24	27.3
	4-5 year				17	80.9	24	35.8	41	46.6
	> 5 year				1	4.8			1	1.1
	Total				21	100	67	100	88	100

Note. SPs^a = School Principals (N =2); DHs^b = Department Heads (N = 67); Cum% = Cumulative Frequency percentage.

As shown in Table 4, only 33.9% (97) of respondent teachers had a total teaching service of one to five years. The overwhelming majority, 66.1% (189), of respondent teachers had a total teaching service of more than five years, out of which 35.7% (102) had more than 15 years of teaching service. Indeed, the overwhelming majority of respondent teachers, 66.4% (190), were served in the current school for more than two years. This implies that the overwhelming majority of respondent teachers have ample experience in the sample schools so as to provide valid data. On the other hand, almost all respondent school administrators, 97.7% (86), had a total service of one to two years, whereas 89.8% (79) of them were served

for more than two years in the school. In terms of service in the current position, 85.7% (18) of the school principals were served for more than four years as school principal. In the case of department heads, 67.2% (45) of them were served on the current position for more than two years, whereas 32.8% (22) were served only for one year. This implies that respondent administrators have ample experience in their current position in order to provide valid data for the study.

In terms of career stage, 33.6% (96) of the respondent teachers were at the lower level of career stage (beginner and junior teacher); 29.7% (85) were at the middle level of career stage (teacher and higher teacher); and 36.7% (105) were at the higher career stage (associate and above associate lead teachers).

Table 5: Student Respondents by Grade level, Sex, and Age

Items		Grade 9			Grade 10			Total
		No.	%	Cum%	No.	%	Cum%	
Sex	Male	148	57.4	57.4	106	49.5	49.5	254
	Female	110	42.6	100	108	50.5	100	218
	Total	258	100		214	100		472
Age	15 year	40	15.5	15.5	3	1.4	1.4	43
	16 year	109	42.2	57.8	58	27.1	28.5	167
	17 year	75	29.1	86.8	87	40.7	69.2	162
	18 year	30	11.6	98.4	60	28	97.2	90
	> 18 year	4	1.6	100	6	2.8	100	10
	Total	258	100		214	100		472

Note. Cum% = Cumulative Frequency percentage

In total, respondent students were 472, out of which 258 (54.66%) were Grade 9 students and 214 (45.34%) were Grade 10 students. In terms of sex proportion, 53.8% (254) of them were males and 46.19% (218) were females.

4.2. Analysis and Interpretation of Data

As described earlier in Methodology section, this research was employed Quan +Qual concurrent mixed method design, where the qualitative results are aligned to triangulate and/or corroborate the quantitative results to get further insights and understandings that lead to credible findings and conclusions. The sequence of data presentation and analysis was in line with the order of basic research questions. First, analysis of data about planning capacity of schools was presented. Second, data analysis with regard to academic staff's performance with a sense of professional learning community was treated. Third, data analysis about leadership capacity of schools followed. Fourth, analysis of data regarding the empowerment and engagement of students, and the engagement of parents/community was presented. Fifth, analysis of data with regard to the resources capacity of schools followed. Finally, the analysis of data regarding the major challenges of the schools for sustainable school improvement was treated.

4. 2.1. Capacity of the Schools in Preparing School Improvement Plan

Six question items in Table 6 below were used to collect data from school administrators (school principals and department heads) for the quantitative assessment of the planning capacity of the schools. Subjecting the data to EPFA at Eigen value greater than one and direct Oblimin rotation produced one principal component on which all items were strongly loaded, with factor loadings ranging from .59 to .82 (see Appendix K, Table K1 for details). It explains 53 % of the total variance of the underlying construct, which is the planning capacity of school in this case.

Table 6: School Principals and Department Heads' View of School Planning Capacity

Items	SPs ^a		DHs ^b		CoM ^c	SD	Sig ^d
	M	SD	M	SD			
1. The school has capacity (knowledge and skill) in preparing specific, measurable school improvement plan	4.52	.51	4.36	.57	4.40	.56	.264
2. The school has capacity in conducting self-evaluation (i.e., capacity to collect relevant data, to analyze and to interpret the data)	4.52	.51	4.19	.74	4.27	.71	.067
3. The school has the capacity (knowledge and skill) in making priority objectives and targets for school improvement planning	4.57	.51	4.52	.66	4.53	.62	1.00
4. The school organizes student achievement scores in a finer summary format	4.33	.58	4.24	.84	4.26	.78	.915
5. The school makes honest monitoring and evaluation of the implementation of school improvement plan	4.38	.59	4.28	.74	4.31	.70	.716
6. The school has an established system for monitoring and evaluation of the implementation of its improvement plan	4.10	.63	4.16	.79	4.15	.75	.571
Cumulative Mean (CM)	4.40	.56	4.29	.73	4.32	.65	.522

Note. SPs^a = School Principal (N = 21); DHs^b = Department Heads (N = 67); CoM^c = Combined Mean; Sig^d = Mann-Whitney U Test (2 tailed) at P < .05.

The power of school self-improvement lies in the development of the school's capacity to collaboratively analyze its current practices and plan interventions (McIntyre, 2011). In this regard, combined cumulative mean score of items in Table 6 (CoM = 4.32, SD = .65) suggests that model secondary schools of Oromia Regional State have good capacity in preparing evidence-based, specific, and measurable school improvement plan. To this end, there was no significant difference between cumulative mean score of the responses of school principals (CM = 4.40, SD = .56) and that of the department heads (CM = 4.29, SD = .73). Item by item analysis was provided below for the details of planning capacity of the schools.

In response to item 1 of Table 6, school principals strongly agreed that model secondary schools had capacity in preparing specific and measurable school improvement plan ($M = 4.52$, $SD = .51$). On the other hand, department heads agreed that the schools had capacity in preparing specific and measurable school improvement plan ($M = 4.36$, $SD = .57$). However, there was no significant difference ($P > .05$) between the means score of the school principals and department heads that the schools had capacity in preparing specific and measurable school improvement.

Evidence-based school improvement planning means that the plan is founded on authentic school-self evaluation (McIntyre, 2011; Mooney & Mausbach, 2008). But, authentic school-self evaluation requires relevant data and the capacity (skill and knowledge) for analyzing and interpreting the data properly so as to identify priority objectives and targets of the school improvement (McIntyre, 2011). To this end, in response to item 2 of the table, both groups of the respondents strongly agreed that the schools had the capacity in conducting self-evaluation. That is, they strongly agreed that the schools had capacity in collecting, analyzing and interpreting data in school self-evaluation ($M = 4.52$, $SD = .51$). On the other hand, in response to item 3, while the school principals strongly agreed that the schools had capacity in making priority objectives and targets in school improvement planning ($M = 4.57$, $SD = .51$), the department heads had agreed that the schools had the capacity in making priority objectives and targets in school improvement planning ($M = 4.52$, $SD = .66$). Nevertheless, as P-values confirm (i.e., $P > .05$), there was no significant difference between the mean score of school principals and department heads that the schools had the capacity in conducting self-evaluation as well as in making priority objectives/targets in school improvement planning.

As shown in the same table, item 4, the school principals and department heads agreed, with no significant difference, that the schools organizes student achievement scores in a

finer summary format (SPs: $M = 4.33$, $SD = .58$; DHs: $M = 4.24$, $SD = .82$; $P > .05$). Furthermore, in responses to item 5 and 6 the respondents agreed, with no significant difference, that their school was used to make an honest monitoring and evaluation of the implementation of school improvement plan (SPs: $M = 4.38$, $SD = .59$; DHs: $M = 4.28$, $SD = .74$; $P > .05$) and that their school had an established system for monitoring and evaluation of the implementation of school improvement plan (SPs: $M = 4.10$, $SD = .56$; DHs: $M = 4.16$, $SD = .79$; $P > .05$).

Interview data collected from school principals (P1, P2, P3 ...P8) and supervisors (SP2, SP3, SP5....SP8) supports the quantitative result. The interview participants expressed with confidence that their school had the capacity (knowledge and skill) in preparing specific and measurable school improvement plan. Indeed, a few participants had strong confidence (e.g., P3, P5, and SP6). All of the interview participants unequivocally asserted that school improvement planning was a participatory process and evidence-based. They expounded that the school improvement planning is carried by school improvement committee and the process starts with schools' self-evaluation/self-assessment.

However, many of the interview school principals and supervisors mentioned lack of "continuous short term training" for school principals on how to prepare school improvement plan. School principals (P1, P2, P6, P7) and school supervisors (SP2, SP3, SP5) pointed out that only two short term trainings (at the end of 1997 E.C and 2004 E.C) were given by Oromia Regional State Education Bureau. School principal (P7) emphasized lack of training for school improvement committee.

Furthermore, the result from document analysis largely supports the quantitative and the interview data analysis described above, but it brought a further insight about the planning capacity of schools beyond the perception data. The documents for the analysis were school improvement strategic plan of 2006-2008 E.C (2014-2016 G.C) and the yearly (annual)

action plan of 2007 E.C (2015 G.C). Examining the planning capacity of the schools through document analysis was focused on four thematic areas (as indicated in the Methodology section).

1. The extent to which the strategic plans are prepared based on relevant and honest evidence.

In this regard, the analysis of the documents revealed that all of the schools began the process of preparing school improvement strategic plan with school self-evaluation. They identify the priority objectives/targets of school improvement through school self-evaluation that is, by identifying the weaknesses (under performances) of the school against the indicators and standards corresponding to each of the four school improvement domains. Often, the schools identify priority improvement areas/standards for action by ranking the identified weaknesses and selecting the most pressing issue for which they feel that they have the capacity to resolve.

2. The extent to which the strategic plans are comprehensive, concise and the contents were presented in a logical coherence.

In all schools, the strategic plan document begins with introduction section that encapsulates a review of the previous plan and information on the importance of quality education and the attention given by the government to improving the quality of education in the GEQIP and SIP. As part of introductory section, the plan provides the school's vision, mission, values as well as goals and objectives of the school. Often, the plans were comprehensive and contained the key contents of good plan presented in a logical sequence. The common contents include (a) introduction, (b) presentation and analysis of self-assessment data, (c) strengths, weaknesses and priorities, (d) Action plan (comprises of goals, objective, strategies/actions, outcome/success indicators, time schedule, implementing bodies).

3. The extent to which the strategic plans are SMART (Specific, Measurable, Achievable, Realistic, and Time-Bound).

There was appreciable attempt by the schools to express objectives in terms of specific and measurable outcomes. The objectives of the plan were specific, often expressed in terms of measurable outcomes. The objectives were written with respect to the elements/standards in the four school improvement domains. Sample objectives taken from the documents were provided below.

- *To create the school environment conducive to teaching-learning, improve the low level of educational facilities in 2013 to high level in 2016.* It is stated in the document as “Naannoo m/b baruu-barsiiisuudhaaf mijataa ta’e uumuufi fasilii barnoota, kan bara 2005tti 55 % irra ture dhuma bara 2008 tti 80% akka guutamu taasisuudha.” (School 4).
- *Increase internal support and supervisory support from 70% in 2013 to 100% in 2016.* It is stated in the document as “kennaa deeggarsa ogummaa fi supervishinii keessoo bara 2005 70% ture bara 2008tti gara 100%tti ol guddisu” (School 3).
- *Improve the low level of performance in giving tutorial support to students with learning problem, and learning disability in 2013 to high level of performance in 2016.* It is stated in the document as “Deeggarsa barattootaa rakkoo barachuu quabanii fi suuteef barnoota dabalataa kennamu, kan bara 2005tti **sad gadaanaarra** ture, dhuma bara 2008tti gara **sadarkaa olaanatti** fooyyeessuudha.” (School 4).
- *“Decrease student dropout and repetition from 5.8% [in 2013] to 1.5% [in 2016]. It is stated in the document as”*Irra deebii fi harcaatii %5.8 irraa gara %1.5 tti xiqqeessuu.” (School 6).

Furthermore, objectives/targets with regard to student academic achievements (test scores) were also included in the strategic plan document of the schools. Sample examples are as follows.

- *Increase the average test score of students from 64.8% in 2013 to 86.25 in 2016.* It is stated in the document as “Qabxii barattoota avereejiin bara 2005tti 64.89% ture, dhuma bara 2008 tti gara 86.25% olguddisuu.” (School 4).
- *Increase the promotion rate of Grade 10 students interring preparatory (Grade 11) from 28% in 2013 to 60% in 2016.* It was stated in the document as ”reetii darbiinsa daree gara daree bara 2005 98% ture bara 2008tti gara 100%tti ol guddisuu.” (School 3).
- *Increase the promotion rate of Grade 10 students interring preparatory program (Grade 11) from 28% in 2013 to 60% in 2016.* It is stated in the document as “Baayina darbinsa barattoota kutaa-10 gara qopha’ina galan, kan bara 2005 tti 28% ture, dhuma bara 2008 tti 60% irra geessisuu.”(School 4).
- *Increase the achievement of those students whose grade level achievement-score from 50% [in 2010] to 90% in 2015.* It is stated in the document as “Barattoota qabxiin isaanii kuta keessa parsantiin 50% ture bara 2007 gara 90% geessisuu.” (School 8).
- *Increase student achievement score at Grade 10 National Examination from 20% in 2010 to 53% in 2014.* It is stated in the document as “Qabxii barattoota qormaata biyyoleessa kuta 10ffaa bara 2002 20% ture bara 2007 tti gara parsantii 53 (53%) ol guddisuu.” (School 8).

4. The extent to which the annual action plans are SMART.

To the extent the strategic plan was SMART as described above, the annual plans were also SMART. The plans were derived from strategic plan. Often, the objectives/targets of annual plans were written in terms of specific and measurable outcomes; and it included

strategies/actions required to achieve the objectives/targets, cost breakdown of the activities, the responsible bodies for the implementation, and the monitoring and evaluation mechanisms.

Nevertheless, some planning capacity gaps were evident from the analysis of strategic plan document, especially with regard to the quality of the analysis, the conciseness of the organization and the presentation of self-evaluation data. First, in most cases, the objectives/targets were over ambitious to attain at the end of three year strategic plan. From the stand point of the existing situations in the schools (financial constraint, low/medium level of people commitment (teachers, parents, and students), it seems difficult for the schools to effectively achieve all of the objectives simultaneously.

Second, apart from taking many standards and indicators of practices, they mostly target the highest level of outcome as an end to achieve. In most cases, objectives/targets were over ambitious to attain at the end of three year strategic plan (2005 to 2008 E.C). For instance, in relation to the standard in one of the elements (i.e., school-based CPD) in the teaching learning domain, the target of School 3 was “50% of teachers will undertake research activities by developing the skill of research under taking.” In the document it is stated as “Barsisisonni Ogumma isaannii fooyyeessuun dhuma bara 2008 tti barsiisoonni %50 kan ta’aan qoraannoof qo’annoo ni gageessu.”

Similarly, the objective/target that School 4 set in relation to the same element (i.e., school-based CPD) in the teaching learning domain was stated as “to solve practical problems of student learning scientifically by improving the current low level of performance of action research undertaking to high level of performance.” In the document, it is stated as:

Qorannoo gochaa rakkoo barachuu barattoota furuu danda’u kan bara 2005tti sad. Gadaanarra ture gara sad. Olanatti fooyyeessuun, rakkoolee barattootni barachuurratti qabanii fi rakkoolee m/b’f karaa saayinsaawaa ta’ee furmaata kennuu.

Furthermore, there were apparent gaps with regard to the presentation and analysis of school self-evaluation data. Often only the “mean rating score” of the standards and/or indicators were indicated in the plan document, regardless of the information about the number of the raters and the frequency distributions. As the result, it is hardly possible to conclude that the self-evaluation results of the schools were genuine and authentic. It is not clear that how many teachers/students are rated the given rating item/indicator “very high”, “high”, “medium”, “low”, or “very low”. In reality, however, the frequency distribution of the responses should be made clear in the text or should be annexed so that the reader of the document could refer when needed. In some schools, when there was an attempt to indicate the frequency distribution of responses, it was done in such a way that all participants/raters were rated the items only on one of the five levels of the scale.

Moreover, qualitative data (from interview, or from staff/student discussions, or other stakeholders) to supplement the quantitative (questionnaire) data were rarely indicated in the plan document.

4.2.2. Staff Performance with a Sense of Professional Learning Community

The questionnaire data to assess the extent to which the academic staff of the schools works with a sense of collaborative Professional Learning Community (PLC) was presented in five Principal Components extracted through EPFA at Eigen value greater than one and direct Oblimin rotation (see Appendix J, Table J for details). The underlying construct of Component 1 is Shared Values, Vision and Collaborative Culture; Component 2 is School-Based Continuous Professional Development (CPD) practice, Component 3 is Collective/Collaborative Learning Practice, Component 4 is Supportive Conditions, and Component 5 is Shared Personal Practice. Together, the five components explain 59.37 % the total variance in PLC scale with a shared variance of 37.52%, 7.83%, 5.29%, 4.74%, and 3.97% respectively. Accordingly, the integration (mixing) of the quantitative and qualitative

data was done in terms of these five components during the analysis and interpretation of the data.

In descending order of their shared variance, the analysis and interpretation of the data is as follows.

1. Shared Vision, Values and Collaborative Culture. This component is the most important component of the quantitative data. It explains 37.52 % of the total variance in PLC of staff. The data are presented in Table 7 and Table 8 below.

Table 7: Teachers' Perception of the Vision and Values of the Schools

Shared Vision		N	M	SD
1.	School's visions is discussed by the staff and a sense of shared vision was developed among staff	285	4.31	.80
2.	The shared vision of school focuses on improving student learning and learning outcome.	286	4.40	.76
	<i>Cumulative Mean (CM)</i>	285	4.35	.69
Shared Values		N	M	SD
3.	Values for school improvement are discussed by the staff and a sense of shared values developed among staff	286	4.21	.84
4.	The shared values of school focus on improving student learning and learning outcome	286	4.29	.78
5.	In this school decisions are made in alignment with the school's shared values and vision.	286	4.05	.89
6.	It is the shared values that govern teachers' norms in this school.	285	4.00	.91
	<i>Cumulative Mean (CM)</i>	285	4.14	.67

In contemporary literature of PLC of school, shared vision and values are the foundation for the development of a sense of shared responsibility and collaborative culture among teachers for the achievement of school improvement objectives/targets (e.g., Day et al., 2011; Harris & Muijs, 2005; Mclaughlin & Talbert, 2006). But, building shared vision and values of school improvement among staff requires inclusive process that the staff and other stakeholders had reached on a consensus and developed a clear picture for what the school

can become (Mitchell & Sackney, 2009; Mooney & Mausbach, 2008). Inclusive participation makes it more likely that the teaching and learning goals of everyone will be focused by the agreed-upon vision and values, and that the daily work and behavior of all the school community, regardless of their position in the school, will bring the vision and values to life (Mitchell & Sackney, 2009). In this regard, as shown in Table 7, respondent teachers agreed that the vision of their school was discussed by the staff and a sense of shared vision was developed among staff ($M = 4.31$; $SD = .80$) and the shared vision of school focuses on improving student learning and learning outcome ($M = 4.40$, $SD = .76$).

Besides, in response to item 3, 4, 5, and 6 of the same table, the respondents agreed that school improvement values were discussed by the staff and a sense of shared values was developed among staff ($M = 4.21$ = $SD = .84$) and that the shared values of school were focused on improving student learning and learning outcome ($M = 4.29$; $SD = .78$). To this connection, the respondents contended that the school decisions were made in line with the schools' shared values and vision ($M = 4.05$, $SD = .89$). Furthermore, the respondents agreed that teachers' norms (behaviors) in the schools were governed by shared values of schools ($M = 4.09$, $SD = .91$).

Similar to the quantitative data, the analysis of interview data gathered from key informant teachers (T1, T2, T3, ...T16) and the school principals (P1, P2, P3, ...P8) reveal that teachers share the vision, mission and core values of their school for they were articulated through participatory process and subjected to discussion and comments by teachers to arrive on consensus. To this end, the views of the interview informants are presented hereunder.

School principal (P1) expressed that the majority of teachers in his school share the vision, mission, and core values of the school.

Teachers were discussed the vision, mission and core values of the school, their comments included and they agreed on the vision, mission, core values, and the goals of the school; the majority of the teachers are working hard to achieve the vision of the school (P1).

Similarly, the interview teacher (T1) of the same school expounded that teachers in the school generally believe in the vision of producing competent student and the majority of teachers were working well in 1-in-5 work group/team of teachers.

On the other hand, the principal (P3) of School 3 states:

Teachers share the vision, mission and core values of the school because we discussed on them, their comments were included. A few teachers may not have in mind the vision, mission, and values of the school. However, the majority teachers believe in vision, mission, and values and have them in mid, and they are performing in that sense (P3).

In the same vein, the interview teacher (T5) of the same school expounded that:

Except a few, the majority of the teachers share the vision, mission, values, and goals of the school for they discussed on them, Moreover, the school principals discuss with teachers the goals and objectives of school improvement plan, and how to implement the plan. Furthermore, the school principal [the head] discusses with teachers 'good experiences' of other schools and encourages us to implement these new experiences. Except a few old senior teachers, especially those who completed the career development ladder, the majority of the teachers are working diligently for sustainable school improvement and student achievement (T5).

Similarly, the school principal of School 5, School 6, School 7, and School 8, as well as the interview teachers in these schools expounded that teachers share the vision, mission and core values of the school for they discussed on the vision, mission and core values of the

school and agreed that they are important things to achieve the goals of the national education policy and the development vision of the country.

The school principal (P5) of School 5 contended that teachers share the vision, mission and core values of the school for teachers and other stakeholders were participated in the preparation of vision, mission, core values and strategic plan of the school. The interview teacher (T9) of the same school had similar opinion.

Teachers believe that the vision, mission and core values of the school are right things and go in line with the teaching learning tasks/duties; we discussed and agreed on their relevance and importance; by accepting the vision, mission and values of the school, teachers are working harder to improve the academic achievement of students; in student achievement, this school is better than other schools in this locality (T9).

When the interview teachers were asked to state the vision statement of their school, most of them had attempted to encapsulate the essence of the vision statement of their school by stating phrases like “producing competent student”; “producing students who are creative and have democratic outlook”; “enabling students to become creative and competent.

The vision statements of the schools were so broad and encapsulate the key outcomes (objectives) of the national education policy and development vision of the country, as opposed to the desired future state of that particular school. Thus, the idea in the literature that the vision of school improvement (or an organization) ought to show the desired future state of the school (or the organization) in order to inspire the actors was the missed gap. For illustration, the vision statement of one school (School 3) is presented here. This school had been selected as a model school in the past three consecutive years (2012 to 2014) by Oromia Regional Education Bureau and it received a letter of recognition for its accomplishment from the Ministry of Education. Its vision statement as translated from Afan Oromo was read

as “At the end of 2012 (2020 G.C), to see that educated citizens equipped with basic knowledge, ability, and attitude for democracy and development is created at the level of Tiro Afata district, Oromia Regional State, Ethiopia and the World.” It is stated in the plan document as:

Dhuma Bara 2012tti lammii baratee beekumsa, dandeettii, ilaalcha misoomaa fi dimokiraasii bu’uura ta’e gonfate sadarkaa Aanaa Xiroo Afataa, Naannoo Oromoyaa, Biyyoolessaa fi addunyaatti horatmee arguudha.

Similar to the vision, the core values of the schools were broad and general, most of which are general core values/principles in the civil service policy of the country. The common values often included in the strategic plan documents of the schools were *openness, participatory, accountability, being free from attitude and practice of rent seeking*. Among a few value statements relevant to “school” or “education” that sometimes included were *adherence to professional ethics, encouraging creativity/innovation, ensuring the quality of education*.

Table 8: Teacher’ Perception of Collaborative Work Culture in Schools

Items	N	M	SD
1. The staff plans and works together to address diverse needs of students.	286	4.09	.92
2. A sense of collective responsibility exists among staff for improving student learning outcome.	286	4.18	.86
3. Disagreements in the staff (on ideas, processes, actions, etc) are resolved through discussions	286	4.19	.84
<i>Cumulative Mean (CM)</i>	286	4.15	.71

Researchers of school improvement advocate that professional learning communities reverse the isolation of teachers and offer a place for teachers to work together and connect with each other to discuss about their own work and the work of their students (e.g., Harris & Muijs 2005; Mitchell & Sackney, 2009; Peterson & Deal, 2009). For instance, Peterson and Deal (2009: 11) remarked that in schools with positive work culture, the staff share

strong norms of collegiality and improvement, collaborative problem solving, planning, and data - driven decision making, value student learning over personal ease, and assume all children can learn if conditions in school are favorable. Harris and Muijs (2005) also emphasize that collaboration between teachers improves the quality of student learning essentially by improving the quality of teaching. By working collaboratively, teachers are able to consider the different ways in which the subject matter can be taught. In this regard, the quantitative data in Table 8 reveal that the staff plans and works together to address diverse needs of students ($M = 4.09$ $SD = .92$) and a sense of collective responsibility developed among staff for improving student learning outcome ($M = 4.18$; $SD = .86$). Furthermore, the respondents agreed that disagreements in the staff on ideas, processes, and actions were resolved through discussion ($M = 4.19$; $SD = .84$).

Similar to the quantitative data in the table, the interview data reveal the existence of collaborative work practices in the schools, in fact in varying degrees of performance levels. It exists at three structural levels/organizations, of which the departmental level 1-in-5 collaborative work group/team of teachers is most fundamental. School principals (P1, P2, P3...P8) contended that the collaborative work of the staff at departmental level, especially that of 1-in-5 collaborative group/team of teachers is the pivotal factor for the success of their school.

There are different levels of collaborative work groups: top-level management group (school principals and PTA); middle level management group (department heads) and department level (1-in-5 teacher groups/teams); the presence of such collaborative work group had made conducive condition for effective work performance of the school; it helped to direct collective efforts of the departments and the teachers on the school's priority objectives/standards (P2).

School principal (P1) expounded the collaborative work culture in his school as follows.

Collaborative work culture exists in the school; this time teachers are working in 1-in-5 work groups/teams or teacher work net; the main task in 1-in-5 teacher groups/team is improving student learning and learning outcome; it enabled teachers to collectively plan the teaching learning process and to implement it, share experience, evaluate each other's performance, make reflection on their practices and the problems encountered through regular meetings of every week (P1).

In the same vein, the principal (P3) of School 3 described the collaborative practice in his school as follows.

Collaborative work culture is the most important factor that has contributed to the success of the school, especially for improving student learning achievement. This school is a well known school in collaborative work of teachers. It is the collaborative work of teachers that enabled our school to become a model school at regional level for the past three consecutive years; as a result of the implementation of 1-in-5 collaborative work groups, the departments and teachers were managed to know and perform their duties without waiting for order and control from the school leadership (P3).

He explained further stating that:

In 1-in-5 collaborative work group, teachers evaluate each other's performance in implementing school improvement plan; the evaluation checklist is provided from their respective department; and on the basis of evaluation, they grade members' performance as A, B, C, D for weekly and monthly performance and notify a model teacher of the week, the month, and ultimately model teacher of the semester (P3).

Similarly, the analysis of teacher interview data revealed the existence of collaborative work practice among teachers in the schools under study. In the interviews, the most frequently reported tasks that teachers collaboratively do in the 1-in-5 work group/team are

preparing common instructional plan, sharing experience on the plan implementation, evaluating and grading each other's performance, discussion on how to overcome the weaknesses in their performance, preparing worksheets, and teaching aids. In 1-in-5 group, members have regular meeting weekly, or every fifteen days and they have minutes of the meetings.

Culture of collaborative work exists in our school. Teachers plan and work collaboratively in 1-in-5 group/team. In the 1-in-5 collaborative group/team teachers meet every fifteen days in order to discuss and share experience on their practices/performances with regard to teaching learning process, which include continuous assessment, active teaching method, student involvement and portion coverage. The main objective is to ensure uniform performance in implementing the department's plan of the teaching learning process (T1, School 1).

Similarly, interview teacher (T3) in School 2 expounded the existence of collaborative work practice of teachers in 1-in-5 work group.

The purpose of 1-in-5 work group is building team spirit among teachers. In my department there was no problem in this regard. Teachers prepare instructional plan together, implement it and share experience about the implementation of the plan and evaluate each other (T3).

Interview teacher (T6) in School 3 described the collaborative work practice in his school.

Yes, collaborative work practices among teachers at the departments; teachers make discussion and evaluate their performance against check list provided from the heads; each teacher reports his/her performance/experience to the group; through evaluation of each other's performance, the group identify the best teacher of the week and the month; group discussion issues and performance evaluation includes

continuous assessment, executing student management role as homeroom teacher and executing teacher leadership role as “teacher leadership” of the week to control students (T6).

Interview teachers in the other five schools described the existence of collaborative work practices in their school in similar fashion. For instance, interview teacher (T9) of School 5 stated the following.

Yes, there has been teachers' collaborative work practices; we make weekly discussion in 1-in-5 collaborative work group/team; we have discussion minute about issues being discussed in such meetings; the discussion issues are about the implementation of the group's plan for effective teaching learning process. It includes about portion coverage, continuous assessment, active teaching method, and achievement test score; that is, whether student academic achievement is “good” and it is in a “small range” of differences (T9).

Interview teacher (T12) of School 6 argued that:

There exists 1-in-5 teacher net at different departments. In fact, it is not culture but dictated by the top-down guideline. In 1-in-5 work group/team, teachers have been doing very well. Of course, practices in 1-in-5 group are not entirely new; many things are the practices that had been traditionally carried out before the advent of school improvement program.

A teacher (T13) in School 7 expounded collaborative work culture in his school as follows.

Culture of collaborative work and helping each other widely exist in this school. School improvement plan is prepared through participating teachers; therefore, culture of collaborative planning, supporting each other and collaborative accomplishment of work exists in the school. In the 1-in-5 work group, teachers

plan together how to teach, how to assess/evaluate students and how to give support to students (T13).

2. School-Based CPD of Teachers. This component is the second important component of PLC data, which explains 7.83 % of the total variance.

Table 9: Teachers' Perception of School-Based CPD Practice

	Items	N	M	SD
1	Teachers in this school had been engaging in school-based professional development (CPD) practices	285	4.32	.86
2.	There had been short term CPD trainings being offered to teachers by District Education Office at school or cluster school level	286	3.53	1.14
3.	Short term CPD trainings being offered to teachers by District Education Office focus on improving professional skills of teachers	286	3.60	1.17
4.	Opportunities exist to share experience from other schools	285	3.58	1.18
5	School supervisor of District Education Office provides expertise support to teachers' school-based CPD practice	285	3.66	1.18
6	Teachers like (happy about) school level CPD practice	286	3.65	1.16
7	Teachers like (happy about) short term CPD trainings offered by District Education Office	286	3.46	1.19
	<i>Cumulative Mean (CM)</i>	283	3.68	.86

Effective schools in implementing school improvement program/reform have a system that supports teachers' professional learning to ensure sustained student achievement gains (Mooney & Mausbach, 2008). To this effect, Ethiopian school improvement program stresses the pivotal role of school-based CPD practice of teachers. Furthermore, schools as well as local education authorities are expected to identify teachers' training needs and offer short term trainings, such as seminar and workshop (MoE, 2009). In this regard, in response to item 2, 3, 4, and 5 of Table 9 the respondents agreed, but with wide variability of responses (i.e., $SD > 1$), that District Education Office had been offering short term trainings to teachers ($M = 3.53$, $SD = 1.41$) and that these short term trainings were focused on improving

teachers' professional skills ($M = 3.60$, $SD = 1.17$), opportunities exist to share experience from other schools ($M = 3.60$, $SD = 1.17$) and Woreda/District Office supervisors provide expertise support to school-based CPD practice of teachers ($M = 3.58$, $SD = 1.18$).

On the other hand, data in Table 9, item 1, reveal that teachers in model secondary schools of Oromia regional state had been engaging in school-based CPD practices ($M = 4.32$, $SD = .86$). Similarly, the analysis of the interview data collected from teachers, school principals, and supervisors indicate that the teachers in the schools had been carrying out CPD in two programs – (i) Induction Program and (ii) Individualized School-Based CPD practice.

Novice teachers carry out CPD under mentor-mentee induction program. On the other hand, senior teachers plan and implement school-based CPD on individual basis in three areas/elements of practices in the teaching learning domain to improve the learning outcome of students. In almost all schools, two of them are areas of concern/weaknesses identified by the school in the school self-evaluation as priority areas for action (strategic or operational) to improve student learning outcome, whereas the other one is any relevant practical action that the teacher him/herself choose to carry out to improve student learning outcome or solve practical problem (evident in interview transcripts of T2, T5, T8, T9, T10, T11, T12, as well as in interview transcripts of school principal P1, P2, P3, ...P8; and supervisor SP2, SP3, ...SP8).

The quantitative data of item 6 and 7 in Table 9 respectively suggest positive ($M = 3.65$, $SD = 1.16$) and neutral ($M = 3.46$, $SD = 1.19$) attitude of teachers about school based CPD practices. However, the relatively large standard deviations ($SD > 1$) indicate large variability of teachers' responses about the central mean score. The explanation for the variation lies in interview data.

The interview data collected from school principals, supervisors and teachers reveal not only two categories of CPD practices pointed out above, but also two categories of teachers in terms of their attitude towards school-based CPD. In the first category, novice teachers in induction program had positive attitude towards the program. In the second category of CPD practice, senior teachers have unfavorable attitude towards school level CPD practice.

To this connection, the majority of senior teachers in the interview contended that the current school-based CPD has no new thing to learn from; what teachers do as school-based CPD practices are the traditional formal duties of teachers under the umbrella of CPD as strategy to make teachers to work for more hours. In this regard, the majority of senior teachers being interviewed persistently pointed out that school-based CPD focuses every year on similar tasks and strategies of improving student learning outcome that it becomes boring; and, due to the sheer absence of novel practices in the current school-based CPD, nothing new can be learned from it. In line with this idea, a senior teacher in one of the schools expressed his opinion as follows.

Quite right, the feeling of many teachers is that because of the fact that the current school-based CPD practice is founded on recurring similar practices year after year, it is boring and has no benefit apart from wasting time; the former centralized CPD works and is better than the current school-based CPD; having roots in many things, the problem of quality of education has been persistent in the country for many years and school-based CPD cannot bring change (T9).

Similarly, school principals and supervisors described that senior teachers especially those who completed career development stage, or near to pension tend to avoid school-based CPD practice. For instance, when the principal of School 6 was asked whether teachers do CPD with enteric interest to improve their competence, or it is because CPD is part of teacher performance appraisal and professional licensing? He responded that:

Yes, there existed such outlook [because it is part of teacher performance appraisal and professional licensing]; some teachers believe in the importance of CPD, others do it for fearing the consequence of not doing, and yet, other teachers who are near to retirement were refused to do at all for they feel nothing to miss as the result of not doing it (SP3).

Thus, as the result of the views of the interview participants that “senior teachers dislike and tend to avoid school-based CPD,” data of item 6 and 7 in Table 9 above were disaggregated into three proportional categories of teacher groups based on career stages (seniority) as shown in Table 10 below.

Table 10: Difference in Teachers’ Perception of School-Based CPD Practice across Levels of Career Stages

Items	Career Stage	Response			95% CI ^a		Sig ^b	
		N	M	SD	LB	UB	F-value	P-Value
Item 6	Lower Level career Stage (Beginner & Junior Teachers)	96	4.00	1.11	3.78	4.22	7.58	.001
	Middle Level Career Stage (Teacher & Associate Lead Teachers)	85	3.59	1.14	3.34	3.83		
	Higher Level Career Stage (Lead Teachers, Associate Higher Teachers, & Higher teachers)	105	3.38	1.17	3.15	3.61		
	<i>Total</i>	286	3.65	3.16	3.51	3.79		
Item 7	Lower Level career Stage (Beginner & Junior Teachers)	96	3.76	3.15	3.53	3.99	5.97	.003
	Middle Level Career Stage (Teachers & Associate Lead Teachers)	85	3.45	1.23	3.18	3.71		
	Higher Level Career Stage (Lead Teachers, Associate Higher, & Higher Teachers)	105	3.19	1.14	2.97	3.41		
	<i>Total</i>	286	3.46	1.19	3.32	3.60		

Note. CI^a = Confidence interval; Sig^b = One-way ANOVA at P = .05.

Data in Table 10 support the aforementioned views of interview participants that senior teachers lack interest to school-based CPD practice. P-value for one-way ANOVA revealed

the existence of significant difference between the mean score of the groups for both items (Item 6: $P = .001$, $\eta^2 = .051$; & Item 7: $P = .003$, $\eta^2 = .042$).

For item 6, Post-hoc test using Tukey's Honestly Significant Different test (HSD) indicated that teachers at Higher Level of Career Stage and Middle Level Career Stage have less favorable attitude for school level CPD practice as compared to teachers at Lower Level Career Stage. Stated in other words, teachers at Lower Level Career Stage have more favorable attitude for school level CPD practice than do teachers at Middle Level Career Stage ($P = .042$) and at Higher Level Career Stage ($P < .0001$).

Similarly, data of item 7 indicate that teachers at Lower Level Career Stage have more favorable attitude than teachers at Higher Level Career Stage ($P = .002$) for short term CPD trainings by Woreda/District Education Office. But, there was no significant difference between Middle Level and Higher Level Career Stage teacher in their attitude for short term CPD trainings by Woreda/District Education Office.

In short the quantitative as well as the qualitative interview data evidenced that teachers in model secondary schools were carrying out school based CPD. However, the data evidenced the presence of unfavorable attitudes on the part of senior teachers and lack of understanding about the purpose and the aspects of school-based CPD practices.

Indeed, the analysis of interview data gathered from teachers, school principals and school supervisors reveal five major challenge in the current school-based CPD practices of teachers: (i) lack interest/enthusiasm on the part of senior teachers; (ii) lack of understanding and know-how of the current school-based CPD; (iii) inconsistent focus from the local education administration office; (iv) indulgence and superficial performance; and (v) misplacing the purpose of doing action research. The detail discussion of each of these problems is presented later under data presentation and analysis for basic research question No. 6 Major challenges facing the schools for sustainable school improvement.

3. Collaborative/Collective learning. This component is the third principal component of PLC data, which accounts for 5.29 % of the variance.

Table 11: Teachers’ Perception of Collaborative/Collective Learning Practice in Schools

Items	N	M	SD
1. The staff engages in dialogue that reflects a respect for diverse ideas on improving the school and student learning outcome	286	4.01	.89
2. A variety of structural arrangements have been established for staff’s learning through open dialogue/discussion	285	4.04	.86
3. Staff members collectively analyze and reflect on the teaching learning process with the aim of bringing improvement in student learning and learning outcome	286	4.27	.99
<i>Cumulative Mean (CM)</i>	285	4.10	.79

It is believed that professional learning communities reverse the isolation of teachers and offer a place for teachers to work together and connect with each other about their own work and the work of their students (Lieberman & Miller, 2007: 105). McLaughlin and Talbert 2001, in Day & Sachs, 2004; 291) contend that improving school will invest in the professional development of their staff and create opportunities for teachers to collaborate and to share best practices. Teachers’ collective focus on student learning and a sense of collective responsibility is central to mature PLC of school. In this regard, data in Table 11 above reveal that teachers in model secondary schools understudy have been engaging in some sort of collective learning (CM = 4.10; SD = .79). Expressed in specific terms, the respondents agreed that that the staff was engaging in dialogue that reflects a respect for diverse ideas for improving the school and student learning outcome (M = 4.01; SD = .89). Furthermore, they agreed that a variety of structural arrangements were established for the learning of staff through open dialogue/discussion (M = 4.04; SD = .86) and the staff was

engaged in collaboratively/collectively analyzing and reflecting on the teaching learning process with the aim of bringing improvement in student learning and learning outcome (M = 4.27; SD = .99).

The qualitative interview data revealed in general three forms collaborative/collective learning practices: (a) experience sharing among departments and different committees and co-curricular clubs; (b) departmental level discussion and reflection of teachers on the problems and practices in the implementation of the department’s plan for improving student learning and learning outcome; (c) school level discussion and reflection of the staff (school principals and teachers) on problems and practices in the implementation of school improvement plan, especially in the teaching learning domain.

4. Supportive conditions. This component constitutes the fourth principal component of PLC data, which accounts for 4.74 % of the variance.

Table 12: Teachers’ Perception of Supportive Conditions for PLC of School

Items	N	M	SD
1. Collegial relationships exist among staff members that reflect commitment to school improvement efforts	286	4.04	1.06
2. Positive relationship that is based on trust and respect exists between school principal and teachers	286	3.96	1.05
3. Positive relationship that is based on trust and respect exists among teachers	286	4.17	.93
4. The school principal fosters positive relationship among the staff	286	4.09	1.05
5. The school had established strictures that promote teachers’ collaboration and collective learning.	286	4.03	.99
6. Teachers have time available for collaborative work and learning	286	4.09	1.00
<i>Cumulative Mean (CM)</i>	286	4.07	.76

The literature reveals that the development of collaborative learning community of staff requires certain conditions that support the collaboration and learning of teachers (e.g.,

Durrant & Holden, 2006; Hopkins 2001; e.g., Mitchell & Sackney, 2009; Mooney & Mausbach, 2008).

Trust and trusting relationship among school communities (among teachers, between teachers and students, between teachers and principal) are frequently cited by researchers in school improvement as precursor of building professional learning communities. In this regard, trusting relationships among staff in schools under study, the data in Table 12 (item 1, item 2, and item 3) reveal that there existed trusting relationships between school principals and teachers ($M = 3.96$, $SD = 1.05$) and among teachers ($M = 4.04$, $SD = 1.06$). To this connection, respondents' response to item 4 reveal that the school principals were fostering positive relationship among the staff ($M = 4.09$, $SD = 1.05$).

Indeed, respondents' response to item 5 and 6 in the same table reveal that the schools were established structures that support the development of staff as collaborative professional learning community ($M = 4.03$, $SD = .99$) and teachers had time available for collaborative work and learning ($M = 4.05$, $SD = 1.00$).

Similarly, the qualitative interview data reveal the existence of positive social relationship among the teachers. In all schools, the school principals expounded the existence of positive relationship among the staff. Almost all of the interview teachers warmly expressed the existence of positive relationship among teachers. Among few less favorable views include the following.

To a large extent the teachers trust each other and the school principals in listening and understanding to each other for working collaboratively to support students benefit from education. Associated to peer-performance evaluation, however, the problem of aloofness is reflected among a few colleagues (T8).

5. Shared personal practice. Shared personal practice is the fifth principal component of PLC, which explains 3.97 % of the variance of PLC of the staff.

Table 13: Teachers' Perception of Shared Personal Practice

Items	N	M	SD
1. Opportunities exist for senior staff for mentoring un experienced newly recruited staff	286	3.83	.97
2. Opportunities exist for senior staff members to observe classroom instruction of the colleagues	286	3.73	1.05
3. After classroom, the senior staff provide feedback to the colleague on his/her classroom instructional practices	286	3.74	.98
4. As colleagues, teachers personally share knowledge and experiences on how to teach their subject to improve student learning.	286	4.09	.95
5. Teachers in the school have been doing action research to solve practical problems in the teaching-learning process	286	3.54	1.20
6. Teachers present the results of their action research to colleagues (for reflection, sharing knowledge and experiences)	286	2.42	1.06
<i>Cumulative Mean (CM)</i>	286	3.56	.75

Teachers in successful schools provide support to one another through collaboration, classroom observation and analysis of one another's teaching (Gordon, 2004). They have the shared belief that the collective actions are greater than the sum of individual actions - a faith in action-in-common, where individual actions integrate to support everybody's success (Donalson 2006; 59). To this connection, data in Table 13, item 1, reveal that there had been a sort of knowledge and experience sharing of teachers in the schools through mentoring ($M = 3.83; .97$). Although there was greater variability in teachers' responses, data in item 2 and item 3 reveal that there was classroom observations by experienced senior teachers ($M = 3.73$, $SD = 1.05$) and feedback to the colleague being observed ($M = 3.74$, $SD = .98$). But, there was wide variability of teachers' responses ($SD > 1$) that "there was classroom observation by experienced senior teachers".

Colleagues' sharing of experiences and opinion on how to teach their subjects for better student learning is one way through which teachers can develop their professional skills and

knowledge (Donalson 2006; Gordon, 2004). In this regard, data in Table 13, item 4, indicate that teachers in model secondary schools, as colleagues, were used to share informally personal experiences and knowledge on how to teach their subjects to improve student learning ($M = 4.09$, $SD = .95$).

On the other hand, data in the same table, item 5, suggest the existence of teachers' involvement in carrying out action research to solve practical problems in the teaching learning process ($M = 3.54$, $SD = 1.20$). However, as the responses to item 6 show they did not present the result of the study to colleagues for experience sharing and reflection ($M = 2.42$, $SD = 1.06$).

The qualitative data reveal similar result to the quantitative data. Novice teachers were engaged in four semester mentor-mentee induction program as part of CPD. It was consistently reported that the mentees have interest in the program and has been actively involved. For instance, the principal of School 2 said that novice teachers in induction program, especially those of "post graduate add on" novice teachers had favorable feeling of the program because they did not have prior formal training in pedagogy. Similarly, the principal of School 3 (P3) expounded the mentor-mentee induction CPD program in his school as follows.

Unlike the senior teachers in the CPD program, novice teachers in the induction (mentor-mentee) program have positive attitude towards the program; they enthusiastically observe the classroom teaching learning practices of their respective mentor, and offer the mentor to observe their classroom instruction and take the comments of the mentor (P3).

Similar to school principals, interview teachers pointed out novice teachers attending in the mentor-mentee (induction) program had positive attitude to the program. For instance, interview teacher (T3) in School 1 stated that "the mentees and mentors have positive attitude

towards the induction (mentor-mentee) program for they understand that it is about sharing experience for the professional development of teachers”.

4.2.3. Leadership Capacity of the Schools

Leadership capacity of the schools was examined in terms of three elements that constitute the leadership capacity of school for sustainable improvement: (i) the leadership practices of the school principals (the heads), (ii) the practice of shared leadership, and (iii) school principals’ qualification and training to the position. The data were collected from teachers and both of these aspects of school leadership capacity are presented here under.

I. Leadership Practices of School Principals as Viewed by Teachers

School principals’ leadership practices were examined in terms of four dimensions: setting direction, developing people; re-designing the organization, managing the teaching learning program. Accordingly, the quantitative and qualitative findings of leadership practices were integrated under these four dimensions of leadership practices of school principals. The data were collected from teachers. In the analysis of questionnaire data, EPFA was applied to establish the subcomponents of data within these dimensions of leadership practices.

1. Setting direction. Data for examining school principal leaderships’ performance in setting direction were collected in three sets of leadership practice areas: *building shared vision, building sense of purpose, and putting high expectation*. Nine items were employed to collect the data. Subjecting the data to EPFA (at Eigen value greater than one and direct Oblimin rotation) produced one Principal Component that explains 62 % of total variance, with factor loadings between .74 and .82 (see Appendix-K, Table K2 for details).

Table 14: Teachers' View of School Principals' Leadership Practice in Building Shared Vision

Items	N	M	SD
1. He/she communicate the improvement vision of school to staff and students, parents and the community	286	4.08	.93
2. He/she works toward building a sense of shared vision among staff, students, and parents	286	4.06	.91
3. He/she works effectively with staff, students and parents to foster shared understandings	286	4.06	.88
<i>Cumulative Mean (CM)</i>	286	4.07	.79

Building and communicating compelling visions of the organization's future is the fundamental task included in both transformational and charismatic leadership models (Day et al., 2011). In this regard, data in Table 14 reveal that school principals in model secondary schools of Oromia Regional State had been performing well in building a sense of shared vision among stake holders (CM = 4.07, SD = .79).

To express in specific terms, in response to item 2 of Table 14 the respondents asserted that their school principals had been working well in building a sense of shared vision among staff, students, and parents (M = 4.06, SD = .91). Furthermore, in response to item 1 and 3 of the table the respondents maintained that their school principals are well communicative of the school improvement vision to staff, students, parents and the community (M = 4.08; SD = .93) and are working effectively with staff, students and parents to foster shared understanding of school improvement initiatives (M = 4.06, SD = .88).

The qualitative interview data collected from teachers confirmed the quantitative data result. The data reveal that although articulating the vision, mission, core values and the goals of the schools was participatory process, the school principal is the pivotal person in clarifying the vision, mission, and core values of the school; and in ensuring that the vision, mission, and core values are shared by the staff. The school principal along with the members of the team/group, (or school-boards as some interviews call it) clarify the vision, mission,

and core values of school improvement to the school community, seeking the school community's consensus that the articulated vision of the school is worth pursuing, the mission is anchored in the goals and objectives of national and local education policy, and the core values are desirable professional and moral entities for achieving the vision and the mission.

Based on various documents, including education policy document, the vision and mission of the District's Education and its priority goals/objectives in the implementation of GEQIP, the group/team was articulated the initial draft of the vision, mission and core values of school and presented it to teachers and other school community for discussion and to reach on consensus (T16).

Similarly, other interview teachers (e.g., T1, T5, T9, T10, T11, T12, T13, and T15) pointed out the participatory process of articulating the vision, mission, core values and the goals of the schools.

The vision, mission, core values of the school were set by school board. Although teachers were not the originators, teachers share the idea of the vision, mission, core values and goals of the school, but not all teachers had equal commitment in the implementation. A few teachers exhibit commitment (T12).

Table 15: Teachers' View of School Principals' Leadership Practice in Building Sense of Purpose and High Expectation

Building Sense of Purpose		N	M	SD
1.	He/she clarifies the mission of school to the staff in terms of the social purposes/goals of school	286	4.06	.852
2.	He/she involves staff in setting school improvement goals and targets	286	4.12	.860
3.	He/she effectively communicates the school improvement goals to staff and students in terms of: specific objectives and targets	286	4.02	.989
<i>Cumulative Mean (CM)</i>		286	4.07	.79
High Expectation		N	M	SD
1.	He/she put high expectation on teachers to work hard for achieving goals and targets of school improvement	285	4.15	.91
2.	He/she puts high expectations on students for better academic achievement	286	4.05	.94
3.	He/she espouses norms of excellence and quality of performance of the staff	286	3.93	.96
<i>Cumulative Mean (CM)</i>		285	4.04	.81

Note. Pair wise analysis was applied so that N = 286 or 285 for the variables in the table.

The set of practices in building sense of purpose are means of promoting cooperation among teachers and getting them to work together toward a common goal. This is because while visions can be inspiring, action typically requires some agreement on the more immediate goals to be accomplished in order to move toward the vision (Day et al., 2011). In this regard, data in Table 15 evidence that school principals in model secondary schools of Oromia Regional State are doing well in providing a sense of purpose to the staff (CM = 4.07, SD = .79). Expressed specifically, the respondents asserted that their school principal clarifies the mission of school to the staff in terms of the social purposes/goals of school (M = 4.06, SD = .85). In addition, the respondents asserted that their school principals involve the staff in setting school improvement goals and targets (M = 4.12, SD = .86) and effectively

communicate the school improvement goals to staff and students in terms of: specific objectives and targets ($M = 4.02$, $SD = .99$).

Furthermore, as data in Table 15 reveal, school principals in model schools put high expectations on staff and students to work hard ($CM = 4.04$, $SD = .81$). Expressed in specific terms, the respondents agreed that their school principal put high expectation on teachers ($M = 4.15$, $SD = .91$) and students ($M = 4.05$, $SD = .94$) to work hard for achieving school improvement goals and targets. Besides, the respondents generally agreed that their school principals promote norms of excellence in performance among the staff ($M = 3.93$; $SD = .96$).

The analysis of interview data collected from teachers indicates that a school principal is the pivotal person in the process of preparing school improvement plan, in setting the improvement goals/objectives, and clarifying the plan's goals/objectives, and strategies/actions to teachers and other stakeholders. It is at this juncture that the school principals get the avenue for putting high performance expectations on the departments and teachers by influencing them to set challenging, yet achievable objectives regarding student learning and learning outcome (test scores). As part of implementing a school improvement plan, departments and teachers in different departments prepare action plan in line with the school's priority goals/objectives in the teaching learning domain, especially that of improving student learning and learning outcome.

To this end, interview teacher in School 8 expounded staff collaborative in his school as follows.

The school leadership carryout all important works in collaboration with teachers, starting from school improvement planning to implementation and evaluation. To implement the school improvement plan, the departments prepare action plan,

implement, and monitor the implementation, including the classroom teaching learning process (T16).

Furthermore, the interview data reveal that the school principal extends high expectation on teachers through monitoring and evaluation of performances in the implementation of school improvement plan using mechanisms such as checklists, reports, and discussions in programmed meetings with staff and parents.

2. *Developing people.* Thirteen items were used to collect data in terms of four roles of school principal in developing people: (a) understanding individuals; (b) providing support to individuals and work groups; (c) intellectual stimulation; and (d) modeling important values. However, subjecting the data to EPFA at Eigen value greater than one and direct Oblimin rotation produced two subcomponents that explain a total of 67.1 % of the total variance, with a respective shared variance of 58.72% (subcomponent one) and 8.35% (subcomponent two). Subcomponent one is *Understanding Individuals and Providing Support to People* (to individuals and groups) and subcomponent two is *Modeling Important Values and Intellectual Stimulation* (see Appendix K, Table K3 for details).

In descending order of their shared variance, the data in the two sub-components were presented in Table 16 and Table 17 below.

Table 16: Teachers' View of School Principals' Leadership Practice in Understanding Individuals and Providing Support to Staff

Understanding Individuals		N	M	SD
1.	Understands that each teacher is an individual having unique needs, abilities, and emotions	286	3.94	.97
2.	know enough each teacher in person	286	3.89	1.03
3.	Understands personal problems and emotions of a teacher	285	3.81	1.09
	<i>Cumulative Mean (CM)</i>	285	3.88	.92
Providing Support to Individuals and Work Groups		N	M	SD
4.	Provides guidance to a needy teacher on how to implement school improvement initiatives	285	3.89	.97
5.	Provides guidance to teacher groups/teams of teachers in a department on how to implement school improvement initiatives	286	4.01	.91
6.	Provide support (e.g., guidance, material resources) to senior teacher leadership/management group/team to enable them carry out duties	285	4.18	.86
7.	Facilitates school based professional learning by creating opportunities for colleagues to learn from each other	286	3.91	1.047
	<i>Cumulative Mean (CM)</i>	284	4.02	.81

As evident from data in Table 16 school principals in model secondary schools of Oromia Regional State have good performance in their leadership practice of understanding individuals (CM = 3.88; SD = .92) and providing support to individuals and groups (CM = 4.02; SD = .81). In this regard, respondent teachers agreed that their school principals know each teacher in person closely (M = 3.89, SD = 1.03) and understands that each individual teacher has unique needs, abilities, and emotions (M = 3.94, SD = .97). In addition, data in the same table attest that the school principals provide adequate guidance to a needy individual teacher on how to implement school improvement initiatives (M = 3.99, SD = .97) and to groups/teams of teachers in departments (M = 4.01, SD = .91) and to senior teacher leadership/management group (M = 4.18, SD = .86). Furthermore, the respondents generally agreed that the school principals were facilitating school-based professional development of

teachers by creating opportunities for colleagues to learn from each other ($M = 3.91$, $SD = 1.05$).

In the qualitative interview, some interviews acknowledged providing guidance as one of the important practice of school principal. For instance, interview teachers (T1) of School 1 stated that “the school principal gives direction/guidelines to groups/teams and departments on task performance expectations and preparation of plan.”

As several interview teachers expounded, the provision of professional support to the technical aspect of the teaching learning program (e.g., classroom instruction, assessment, and teachers’ support to students) was largely bestowed to committee led by senior teachers (e.g., teacher support and professional development committee, curriculum implementation and evaluation committee) and department heads.

Support to teachers on the teaching learning process was given more by teacher support and professional development committee and curriculum committee; These committee monitor and provide support to the teaching learning process; the types of support: include counseling teachers having problem of performance, controlling lost periods, listening to student complaints---internal supervision committee is under this committee (T8).

Table 17: Teachers' View of School Principals' Leadership Practice in Intellectual Stimulation and Modeling Important Values

Intellectual Stimulation		N	M	SD
1.	Encourage teachers for innovative ways of solving problems	286	3.93	1.02
2.	Encourages teachers to evaluate and refine their professional practices	286	4.09	.91
3.	Encourage teachers to learn new professional skills and abilities	286	3.96	.96
	Cumulative Mean (CM)	286	3.97	.82
Modeling Important Values		N	M	SD
4.	Display energy and enthusiasm for the improvement of the school	286	4.01	.98
5.	Exemplary in his/her commitment to school shared values	286	3.96	.89
6.	Exemplary in his/her commitment to the achievement of school improvement goals	286	4.03	.86
	Cumulative Mean (CM)	286	4.00	.79

Modeling and intellectual stimulation is among the important practices of school principal in developing people (Day et al., 2011; Leithwood, Harris & Hopkins, 2008; Leithwood & Riehl, 2005). Modeling entails leading by example. Studies indicate that successful heads 'model behaviors that they considered desirable to achieve the school goals (Day et al., 2011).

Practices in intellectual stimulation include challenging the status quo in the practices contributing to leader effects on students. This is where the leader's role in professional development is found to be a key role, especially for leaders of schools in challenging circumstances. It also reflects the current understandings of learning as constructed, social and situated (Day et al., 2011). In this regard, data in Table 17 reveal that school principals in model secondary schools were doing well in intellectual stimulation (CM =3.97; SD = .82), and in modeling important values for sustainable school improvement (CM = 4.00 , SD = .79).

With regard to intellectual stimulation, the respondents generally agreed that their school principals encourage teachers for innovative ways of solving problems (M =3.93; SD

= 1.02); to evaluate their professional practices and refine them as needed (M = 4.09, SD = .96) and to learn new professional skills and abilities (M = 3.96, SD = .96). In terms of modeling important values, the respondents asserted that the school principals in model secondary schools were working with high energy to realize the improvement of the school (M = 4.01, SD = .98), are exemplary in their commitment to the shared values of school improvement (M = 3.96, SD = .89) and to the achievement of school improvement goals (M = 4.03, SD = .86).

The analysis of interview data collected from teachers ascertains the finding from quantitative data both for modeling and intellectual stimulation behaviors of the school principals. With regard to modeling, the interview teachers were asked to describe the modeling (exemplary) behaviors, practices and values of their school principals. As a result, the commonly mentioned modeling behavior of school principals was the work commitment (devotion for the implementation of school improvement plan and effective work performance). Almost all interview teachers expounded that the school principals, including the vices, were available throughout the day executing their duties, get to office early and get out late, and they spent their time on school work on Saturdays, and even on Sundays. For instance, interview teacher (T10) in School 5 stated the modeling behavior of his school principal as follows.

As to me the school principal is exemplary in many aspects; open, encourage others, friendly, lead by plan, participatory plan, and delegate work to others. He has devotion for the work. He is always available (spend the whole day on the school's work), come to school early and get out late, used to work on Saturdays and Sundays (T10).

Only two of the interview teachers (T9 and T16) of School 5 and School 8 were moderately described the modeling practices/behaviors of their school principal.

The word a model is difficult word. One cannot be a model in everything. The meaning of the word model or exemplary is relative and varies depending on the perception of the individual....Well, the school principal devotion to the work is good, but the work devotion cannot qualify him as a model school principal (T9). Being a model is not easy thing. But, in relative term, the principal is exemplary in using time; leading through smooth relationship with teachers; listening to all, not aggressive (T16).

In relation to intellectual stimulation, on the other hand, the interview data reveal that teachers lack interest/enthusiasm to school-based professional development practice. Nevertheless, the interview data evidenced that the school principals were enforcing the implementation of school-based professional development of teachers. Consequently, there was a progress in teachers' undertaking of school-based CPD practice in the schools, as compared to the initial implementation period. In fact, the management and facilitation of CPD is the shared leadership of the school principal, the CPD committee and the department heads.

3. Re-designing school organization. Data in this dimension of school principal practice were collected in terms of three sets of practices: (a) re-structuring the internal organization of the school to empower teachers, (b) building collaborative culture and climate of trust among staff; and (b) connecting the school with the local community. Subjecting the 14 data collection items of this dimension to EPFA at Eigen value greater than one and direct Oblimin rotation was also produced three sub-components: (i) re-structuring internal organization of school, (ii) building collaborative culture and climate of trust, and (iii) connecting school with the local community. The three components explain 72.1% of total variance, with a respective shared variance of 52.6% (re-structuring), 11.1% (collaborative

culture and trust) and 7.79% (connecting school with the local community). See Appendix L, Table L1 for details.

In descending order of their shared variance, the components were presented in Table 18, Table 19, and Table 20 below.

Table 18: Teachers’ View of School Principals’ Leadership Practice in Re-structuring Internal Organization of the School

Items	N	M	SD
1.. Established structure for participating senior teachers in the supervision of the teaching learning process	286	4.30	.77
2 Established structure for participating teachers for the management and the co-ordination of school-based CPD	286	4.10	.72
3. Established structure for organizing teachers in a department/s into collaborative work groups/teams	285	4.61	.58
4. Organized teachers in a respective departments into collaborative, work groups/teams	285	4.53	.63
<i>Cumulative Mean (CM)</i>	285	4.38	.60

Organizational culture and structure are two sides of the same coin. That is, developing and sustaining collaborative cultures depend on putting in place complementary structures, typically something requiring leadership initiative. Practices associated with such initiatives include creating common planning times for teachers, and establishing team and group structures for problem solving (Day et al., 2011). To this end, data in the Table 18 attest that school principals in model secondary schools of Oromia Regional State had done well in re-structuring the internal organization of the to empower teachers and foster collaboration (CM = 4.38 , SD = .60), although such initiation was prompted by the top-down school improvement program. In this regard, data in Table 18 confirms that the school principals in model secondary schools of the Regional State were established structure for participating senior teachers in the supervision of the teaching learning process (M = 4.30, SD = .77), for the co-ordination of school-based CPD (M = 4.10, SD = .72), and for organizing teachers in

departments into collaborative work group team/s ($M = 4.61$, $SD = .58$) and that teachers in the respective departments were organized into collaborative work teams/groups ($M = 4.53$, $SD = .63$).

Table 19: Teachers' View of School Principals' Leadership Practice in Building Collaborative Culture and Climate of Trust

Building Collaborative Culture		N	M	SD
1.	Encourages group planning of teachers to improve student learning outcome	286	4.14	.85
2.	Inspires teachers to work collaboratively in teams/groups for achieving school improvement goals and objectives	286	4.11	.82
3.	Provide the required support for teachers' collaborative work	286	4.01	.92
4.	Facilitates the staff's collaborative work	286	4.05	.90
<i>Cumulative Mean (CM)</i>		286	4.09	.74
Building Climate of Trust		N	M	SD
5.	Shows a respectful tone of interaction with staff members	286	4.08	.98
6.	Shows respect to the suggestions and comments of staff	286	4.07	.97
7.	Does not hurry to criticize before having valid information for fair judgment	286	3.93	.96
<i>Cumulative Mean (CM)</i>		286	4.03	.82

Leaders contribute to productive collaborative activity in their schools by being skilled conveners of that work. They nurture mutual respect and trust among those involved in collaborating, ensure the shared determination of group processes and outcomes, help develop clarity about goals and roles for collaboration, foster open and fluent communication among collaborators, and provide adequate and consistent resources in support of collaborative work (Day et al., 2011). To this connection, data in Table 19 indicate that school principals in model secondary school of Oromia Regional State were playing well their role of building collaborative culture in their school ($CM = 4.09$, $SD = .74$). Respondent teachers agreed that the school principals encourage group planning of teachers to improve student learning outcome ($M = 4.14$, $SD = .85$), inspire teachers to work collaboratively in teams/groups for achieving school improvement goals and objectives ($M =$

4.11, SD = .82) and provide the required support (M = 4.01, SD = .92) and facilitation (M = 4.05; SD = .90) to teachers' collaborative work.

In the qualitative interview as well, the interview teachers basically mentioned two practices/behaviors of school principals in building and facilitating collaborative culture in the schools: (a) establishing structures for collaboration (i.e., establishing collaborative groups/teams of teachers at departments) and encouraging the collaborative work of teachers in such collaborative groups/teams. The interview (T1) and (T9) in School 1 and School 5 respectively described the role of their school principal in building collaborative cultures as follows.

The school principal encourage collaboration and unity among teachers to work in 1-in-5 work group/team of teachers; organized different committees and provide material support to committees (T1); The school principal facilitates the formation of different collaborative work groups and provide guidance and material support, but he has weakness is in implementing this in all departments (T9).

Interview teacher (T3) in School 2 explained that the school principal facilitates collaborative work formation by organizing teachers into 1-in-5 work group/team to plan and implement common instruction in their respective subject, share experience on each other's performances, and to discuss on practical problems. Similarly, the interview teacher (T8) in School 4 described that the school principal facilitates collaborative work culture through organization of staff into 1-in-5 in which teachers collaboratively plan, and discuss/exchange information on each other's performance/practice, problems encountered and the solution to the problem. Nevertheless, it is the external pressure associated with standard-based top-down school improvement program that prompted efforts for a greater collaboration and distribution of leadership role to teacher leadership group/team, department heads, and different committees.

In addition, data in the Table 18 above reveal that the school principals exhibit behaviors that nurture climate of trust and respectful relationships between themselves and among teachers (CM 4.03 =, SD =.82). In this regard, data in Table 19 reveal that the school principals show a respectful tone of interaction with staff members (M = 4.02, SD = .98), give respect to the suggestions and comments of staff (M = 4.07, SD = .97) and did not hurry to criticize before having valid information for fair judgment (M = 3.93, SD = .96).

In the qualitative interview that focuses on school principals' practices/behaviors to build and maintain trusting relationship with the staff (e.g., respect teachers, understand teachers' personal problem, and provide support/guidance to the staff to carry out tasks effectively), almost all of the interview teachers warmly acknowledged that their school principal is friendly, impartial, understands teachers' personal problems and solves conflicts peacefully. Respecting and valuing/taking care for the staff is essential behavior of school leader in order to build trusting relationship between the staff and him/her self. In this regard, almost all of the interviews were warmly stated that their school principal is good at respecting and valuing/taking care for the staff.

Table 20: Teachers' View of School Principals' Leadership Practice in Connecting School with Local Community

Items	N	M	SD
1. Effective in establishing productive relationship of the school with the local community	286	3.91	.93
2. Effective in ensuring parental and local community support for school improvement.	286	4.00	.93
3. Effective in communicating and working with community representatives (i.e., with PTA)	285	4.11	.83
<i>Cumulative Mean (CM)</i>	285	4.01	.81

As Agbo (2007) points out, the advocates of school community relations believe that parent and community involvement will mobilize and create resources that schools may not

be able to generate. In the present school improvement program in Ethiopia, school principals are expected to foster increased integration between the school, parents and the community at large. In this regard, as shown in Table 20, school principals in model secondary school of Oromia Regional State were executing well their role of establishing effective relationship with parents and the local community (CM = 4.01, SD = .81). Data in the table reveal that the school principals were effective in establishing productive relationship between the school and the local community (M =3.91, SD = .93), in ensuring parental and local community support for school improvement (M =4.00, SD = .93) and working with community representatives, that is, with PTA (M = 4.11, SD = .83).

The qualitative data confirm the quantitative result. Almost all of the interview teachers stated that their school principal was working very well with PTA and able to get financial support for the school from the parents and local community.

The school has good relation with parent representatives in PTA and the PTA works very closely with the school. The PTA head frequently come to visit the school. The school makes two or more times school-parent/community days/forums within a year (one at the beginning and the other at the end of the year). In such forums, the school reports school's plans, performances and problems that require parent/community involvement; and the parents' give opinion on the school performance and problems that the school presented to them; the parents/community is willingly providing financial support to the school for building classrooms and for fulfilling facilities (T1).

Similarly, almost all interview teachers expressed that their school principal is working well in building productive school-parent/community relations. Only one interview (T9) in School 5 expressed dissatisfaction with school's efforts in building productive school-

parent/community relations; and with the responsiveness of parents/community when the school calls for their involvement.

4. Managing the teaching learning program. In view of the scope of authority of schools in the context of Ethiopia as well as the role of school principal in the management of classroom instruction at secondary school level, five rating items were prepared to measure the practice of school principals in managing the teaching learning program. EPFA of the items at Eigen value greater than one was produced one component that explains 65.47 % of total variance, with factor loadings ranging between .77 and .88 (see Appendix L, Table L2 for details). The data is presented in Table 21 below.

Table 21: Teachers’ View of School Principals’ Leadership Practice in Managing the Teaching Learning Program

Items	N	M	SD
1. Focus on the teaching-learning program and take proactive measures before things get wrong	286	4.13	.84
2. Monitor teachers’ performance toward achieving goals and targets	286	3.87	1.01
3. Give adequate attention to improving classroom teaching-learning process	286	4.02	.90
4. Regularly supervise the classroom teaching-learning process.	286	3.88	1.01
5. Allocate resources (man power, financial and material) in a way that promote effective teaching learning process	286	3.92	1.02
<i>Cumulative Mean (CM)</i>	286	3.97	.77

Data in Table 21 reveal that school principals in model secondary schools of Oromia Regional State are performing well their role of managing the teaching learning program (CM = 3.97, SD = .77). Teacher respondents asserted that the school principals give focus to the teaching-learning program and take proactive measures before things get wrong (M = 4.13; SD = .84), monitor teachers’ performance toward achieving goals and targets (M = 3.87, SD = 1.01), Furthermore, respondents confirmed that school principals give adequate attention to improving the classroom teaching-learning process (4.02, SD = .90), regularly

supervise the classroom teaching-learning process.(M = 3.88, SD = 1.01) and allocate resources (man power, financial and material) in a way that promote effective teaching learning process (M = 3.92 , SD = 1.02).

The result from the analysis of the qualitative interview with teachers affirms the quantitative result. Almost all of the interview teachers asserted that their school principal gives due attention to the teaching learning process and facilitates it to the extent he/she can. None of the interviews complain that the school principal give less attention to the teaching learning process.

The school principal is working very well in facilitating the teaching learning process (T4, T5, T6, T8); he purchases the teaching learning materials (T4, T5, T6); uses the larger proportion of the school finance/budget to improve the teaching learning program (T8).

In more elaborative statement, the other interview stated his school principals' attention to the teaching learning program as follows.

Up to the financial capacity of the school, the school principal is facilitating the teaching learning process; for example, to fulfill laboratory and library facilities and to make the classroom conducive to the teaching learning process. Yet, there are some problems beyond school's capacity to solve; for instance, some classrooms are not conducive to teaching learning process because they are below standard (wood and mud made buildings); discontinuity of Plasma TV instructional program and absence of maintenance for Plasma TV; and absence of laboratory technician....

Nevertheless, things are better these days than before (T9).

Basically, the school principals in model schools use two methods for the monitoring of the teaching learning process, including classroom instruction: *indirect* and *direct method*.

i. Indirect method. To a large extent, school principals perform the monitoring of the teaching learning process indirectly through the shared leadership of teachers and students. Delegation to teaching learning committee and the departments is the major method of monitoring the school performance in the teaching learning process.

Classroom monitoring (teacher attendance) and teaching learning process is done more of by departments; the school principal monitor the teaching learning process through others such as department heads, the teaching learning supervisory team/group (T9).

Furthermore, they extend their indirect method of monitoring of the teaching learning process through gathering information from students regarding the various aspects of classroom teaching learning process, including lost periods, instructional and assessment methods, tutorials, and make-up classes.

ii. Direct method. The school principals (the vices and the head) move around and observe the smooth running of the classroom teaching learning process. For the school function in shift system, the school principal (head) often went to lunch after ensuring the smooth start up of the afternoon shift classes.

II. Shared Leadership Practices

Seven rating items were used for collecting data regarding the practices of shared leadership in schools understudy. The items were subjected to EPFA at Eigen value greater than one and direct Oblimin rotation. As a result, one principal component with all rating items strongly loaded on it, and explaining 62.24% of the variance was produced (see Appendix L, Table L3 for details).

Table 22: Teachers and School Administrators' View of the Practices of Shared Leadership

Items	Teachers (N = 281)		Administrators ^a (N = 88)		Sig ^b
	M	SD	M	SD	
	1. The school principal involve teachers in relevant decision making of school	4.13	.91	4.25	
2. The school principal uses delegation of tasks to teachers (e.g., teams, committee, taskforce, etc)	3.98	.93	4.18	.86	.058
3. The school principal encourages shared leadership of school	4.05	.91	4.32	.72	.014
4. Teachers have strong sense of shared responsibility in the leadership of school	4.05	.94	4.26	.75	.106
5. Teachers are actively involved in sharing the leadership of the school	3.91	.98	4.07	.80	.301
6. Students have strong sense of shared responsibility in the leadership of the school	3.90	.97	3.69	1.00	.069
7. Student representatives are actively involved in managing student behavior	3.85	1.04	3.80	1.02	.600
<i>Cumulative Mean (CM)</i>	<i>3.99</i>	<i>.73</i>	<i>4.08</i>	<i>.65</i>	<i>.307</i>

Note. School Administrators^a = School Principals and Department Heads; Sig^b = Mann-Whitney U Test (2-tailed) at P < .05.

It is believed that teacher leadership is at the core of building broad-base leadership capacity of school and solves the problem of school leadership succession (Harris & Lambert, 2003). A review of teacher leadership studies by Harris and Muijs (2005) indicates that where teachers work collaboratively and where leadership responsibilities are devolved, teachers' expectations, morale and confidence are significantly enhanced. In this regard, as shown in Table 22, item 1 and 2, both categories of respondents attested, with no significant difference, that the school principals involve teachers in relevant decision makings (M = 4.13; 4.25) and uses delegation of tasks to teachers (M = 3.98; 4.18).

In addition, in response to item 3 of the table, the respondents confirmed that the school principals encourage shared leadership ($M = 4.05$; 4.32 ; $P = .014$). Indeed, both categories of the respondents agreed, with no significant difference, that teachers had strong sense of shared responsibility in the leadership of school ($M = 4.05$; 4.26) and they are actively involved in sharing the leadership of the school ($M = 3.91$; 4.07).

Involvement of students in the leadership of their school is an important aspect of school's leadership capacity to ensure sustainable improvement (Harris, 2002). To this effect, student councils or unions could be established in schools so that students may participate in the administration of schools in an organized manner (UNESCO, 2005). To this end, as depicted in Table 22, item 6 and 7, both groups of respondents agreed, but with relatively large variability of responses ($SD > 1$), that students have strong sense of shared responsibility in the leadership of the school ($M = 3.90$, 3.69) and student representatives are actively involved in managing student behavior ($M = 3.85$; 3.80).

Similarly, the qualitative interview data collected from teachers, school principals and supervisors revealed the active involvement of teachers in the leadership and decision making of the schools. For instance, the principal (P4) explained teacher shared leadership as follows.

We work through sharing leadership....many tasks are carried out at department level; what is important is to discuss with teachers and to guide them; the traditional view among teachers that maintains 'the duty of teachers is teaching only' was changed (P4).

In the same vein, interview teacher (T13) expounded teacher shared leadership in his school as follows.

Sharing of leadership exists in the school. Several leadership tasks were bestowed to departments and different committees. The school principal delegate tasks in terms of measurable performance outcomes to the department heads and different

committees. The department heads and the committees, in turn, assign tasks to teachers in terms of miserable outcome-based performance, guide and facilitate conditions (T13).

With the advent of school improvement program, a wide range of shared leadership practices of teachers were evident in the schools. Apart from the traditional formal positions such as department heads and unit leaders, structures such as senior teacher leadership group (or team) and the various committee led by teachers were the different areas of teacher leadership practices in the schools.

III. School Principals Qualifications and Training to the Position

Thirty eight percent (7 out of 21) school principals had MA degree. The majority of the school principals/school-heads (5 out of 8) were Master's degree in educational leadership/school leadership. However, vice principals lack such level of training to the position.

Moreover, several interviews (e.g., P5, SP5, P7, T15, T16) pointed out the problem of attracting experienced and competent individuals to school leadership position in general and that of the deputy principal positions in particular. One embedding factor mentioned by the participants include the pay-off of the position is not enticing to able and experienced teachers, such as those in higher career ladder (e.g., higher teacher, lead teacher, higher lead teacher), feeling of insecurity (demotion or firing) that would likely arise from intervention and unfair judgment of higher officials (T15, T15). Furthermore, some interview teachers (T12, T15, T16) doubt the selection and appointment of school principal was solely merit-based. In schools predominantly staffed with experienced senior teachers (e.g., School 5, School 6, School 7, and School-8), interview teachers (T12, T13, and T15) expressed that it is the political intimacy rather than the ability that brought the principals to the position.

These interview teachers expressed that most of the able and experienced senior teachers do not apply to the school leadership position.

Evidently, the other challenge to building leadership capacity of the schools was that school principals sometimes promote to positions at the Local Education Office or other public institutions (e.g., School 3), or leave the job for other job in other organizations, often public institutions (e.g. P8). Indeed, the school principals often transfer to second cycle secondary schools (i.e. preparatory schools/Grade 11-12).

4.2.4. Empowerment and Engagement of Students, and Engagement of Parents/Community

I. Empowerment and Engagement of Students

A. Student Empowerment. Twelve rating items were employed for collecting data on student empowerment. Subjecting the data to EPFA at Eigen value greater than one and direct Oblimin rotation was produced two Components: (i) *Taking responsibility for Self-Control of Misbehavior and Learning*; (ii) *Active involvement in school decision making and presenting their voices to school administration* (see Appendix-M, Table M1 for details). The two components explain 41.6 % the total variance of student empowerment with a respective shared variance of 32.4% (self-control) and 19.2% (involvement). In order of the shared variance, the analysis of data was presented in Table 23 and Table 24 below.

Table 23: Students' View of their Empowerment in Taking Responsibility for Self-Control of Misbehaviors and Learning

	Items	M	SD
1.	Student in the school respect their teachers	4.14	1.14
2.	Students in the school do what their teachers ordered them to do (e.g., individual and group works)	4.15	1.12
3.	Students in the school respect the rules and regulations of the school	4.12	1.12
4.	Students in your class show disciplinary classroom behavior	3.81	1.27
5.	Students in the school take the responsibility for self-controlling of misbehaviors	3.86	1.17
6.	Students in the school respect and help each other in "1-in-5" learning group	4.11	1.20
7.	Students in this school take responsibility for their individual learning (e.g., doing assignments, home works, and to study)	4.16	1.10
8.	Students take responsibility for their learning in "1-in-5" learning group	3.93	1.23
	<i>Cumulative Mean (CM)</i>	<i>4.03</i>	<i>.73</i>

Harvey (2004-13) defines student empowerment as the development of knowledge, skills and abilities in the learner to enable them to control and develop their own learning. Empowering students and creating an empowered learning environment will potentially develop students' ownership in the learning process. To this effect, one way of empowering students is the conceptions of classrooms as communities of learners helping each other to transform latent capabilities to active powers for the enhancement of all (Harris, 2002; Sergovanni, 2001). To this effect, the cumulative mean score of the items in Table 23 shows that student empowerment in terms of taking responsibility for self-control of misbehavior and their own learning was good (CM = 4.03, SD = .73). Nevertheless, for individual items in Table 23, the relatively large standard deviations (SD >1) of students responses indicate a relatively large variability of student views with respect to the mean score.

With regard to taking responsibility for self-control of misbehavior, the respondents agreed, but with large variability of responses (SD >1), that students in their school respect

teachers ($M = 4.14$, $SD = 1.14$); do what their teachers ordered them to do, such as individual and group works ($M = 4.15$, $SD = 1.12$); respect the rules and regulations of the school ($M = 4.12$, $SD = 1.12$); and that students show disciplinary classroom behavior ($M = 3.81$, $SD = 1.27$). With regard to taking responsibility for self-control of their own learning, the respondents agreed that students take responsibility for their learning in “1-in-5” learning group ($M = 4.11$, $SD = 1.20$) and for individual learning, such as in doing assignments, home works, and to study ($M = 4.16$, $SD = 1.10$). Indeed, they agreed, but with large variability of responses ($SD > 1$), that students respect and help each other in “1-in-5” learning group ($M = 3.86$, $SD = 1.17$).

The qualitative data revealed the existence of three level structures/organizations in order to enable students to take responsibility for self-control of misbehaviors and their learning. At classroom level students are organized into 1-in-5 collaborative peer-learning group (to discuss, study and do group work/assignments so as to optimize the learning and learning outcome of students, especially those of the low and average level learning students in the group). The name 1-in-5 refers to “one top learning student” in “four students,” who are average and low learning. Five students from among the ten top students of the class are classroom representatives for five different areas of responsibilities classroom discipline, student vision/aspiration, student learning/study, student achievement/test score, and student absenteeism.

Similar to the classroom level, shift level student leadership group (committee) consists of members responsible for issues such as student discipline, student learning, student achievement or test score, and student absenteeism. The third level student leadership group is the top level leadership that holds discussion with students and the school management about problems in student learning and student discipline.

School principals and teachers contended that the empowerment of students through these structural levels raised the awareness of students about their rights and obligations; and, consequently, it improved student disciplinary behavior in respecting teachers as well as the rules and regulations of the school.

The principal of School 2 pointed out student discipline in his school as follows.

With regard to respecting rules and regulations of the school our students are very good; the Civic and Ethical Education Club of the school gives more than two times orientation to newly coming students of grade nine about their rights and obligations; Besides, we post the rights and obligation of students on notice board and the rules and regulations of the school in classrooms (P2).

The principal of School 5 described student disciplinary behavior in his school in similar way to school principal (P2).

In the case of our school, student discipline is very good; students have very good disciplinary behaviors; when we advice them, they listen us; students are very open in their nature; they openly tell us our problems; about 80 to 90% of them are obedient to rules and regulations of the school (P5).

Similarly, the other school principals remarked students' empowerment in self-control of misbehavior as follows.

Student empowerment improved the problem of student misbehavior (P3); brought substantial positive behavioral changes in students; the culture of copying ones work (or cheating) during examination is minimized (P6); students respect the rules and regulations of the school except a few students of this town origin (P7).

Teachers' opinion about student empowerment in control ling misbehaviors was not significantly different from the views of the school principals. They asserted that student disciplinary behavior was improved with the advent of school improvement program,

With the advent of school improvement program, student disciplinary behavior was improved. In the past, students skip classes, did not respect teachers, make clashes with teachers and harass female students (T13).

Similarly, the other teacher stated improvement in student misbehavior behavior as follows.

When compared to the past, there is great improvement in student disciplinary misbehavior. In the past students did not attend the Friday class, they go home leaving classes, they jump school fence, there were clashes among students. Now days, student disciplinary misbehavior was improved as they were taught and advised several times about the rights and obligations of a student (T8).

In the quantitative method, although students assert that students take responsibility for self-control of their learning in the quantitative method many interview teachers (T9, T12, T13, and T16) as well as students (FGD2, FGD3, FGD4, FGD5, FGD6) contend that 1-in-5 collaborative peer-learning group is promoting dependency in student learning, as most of the low and average learning ability students depend on the top ones in doing group assignments/projects.

One-in-five collaborative peer-learning group has the good side as well as the bad side. Its good side is that it makes students to control each other and, thus, improved student discipline; and its bad side is that it is promoting dependency; when group assignment is given, only few students would do the assignment (T16).

Similarly, students (e.g., FGD2, FGD3, FGD4, FGD5, and FGD6) agreed that 1-in-5 peer-learning group of student is promoting dependency. For instance, in School 2 one of the students remarked that:

One-in-five collaborative learning group (raayyaa tokko-shanii) is good in itself; many minds are better than one; but its problem is that often only the representative

of the group does group assignments; most members do not worry about doing the assignment (FGD2).

Table 24: Students' View of their Participation in Decision Making and Presenting Student Problems to School Administration

	Items	M	SD
1.	The school involves students in school leadership/management	4.14	1.07
2.	The school seeks for student opinion for school improvement planning	3.96	1.16
3.	Student council (student parliament) is actively involved in school decision-making important to students	3.70	1.26
4.	Student council (student parliament) actively presents student voices to school leadership/management	3.84	1.18
	<i>Cumulative Mean (CM)</i>	<i>3.91</i>	<i>.78</i>

Student empowerment includes the involvement of students in school leadership and decision making affairs relevant to them. In schools with a highly developed improvement capacity, students are seen as a significant voice, as co-leaders in the school improvement efforts, as well as the prime focus for school improvement activity (West et al., 2000). As the cumulative mean score of student responses to items in Table 24 suggest, there was student involvement in school decision makings through representatives (CM = 3.91, SD = .78). However, the relatively large standard deviation values (SD >1) of students responses to the items in Table 24 indicate a relatively large variability in student views with respect to the mean score.

As data in the table show, respondent students agreed that their school involves students in school leadership/management affairs (M = 4.14, SD = 1.07). However, students widely differ in their view (SD >1) that the school takes student opinion for school improvement planning (M = 3.96, SD = 1.16); student council (student parliament) is actively involved in school decision-making important to students (M = 3.70, SD = 1.26) and in actively presenting student voices to school leadership/management (M = 3.84, SD = 1.18).

In qualitative interview, school principals pointed out that the president and the prime minister in the student parliament/council were members of PTA and take part in important school decisions regarding students and student learning. Nevertheless, most of students in FGD were not much certain about the involvement of student president and/or prime minister in school decision making.

Table 25: Comparison of Male and Female Students' View of Student Empowerment

Scale and Subscales	Male (n = 254)		Female (n = 218)		Sig ^a		
	M	SD	M	SD	t-value	df.	P
Student Empowerment Total Scale (12 Items)	4.01	.70	3.97	.62	.696	469.7	.487
• Involvement in school decision making sub- component (4 Items)	3.91	.84	3.91	.71	.042	469.9	.967
• Self-Control of misbehavior and learning sub-component (8 Items)	4.06	.76	4.00	.70	.920	468.4	.358

Note. Sig^a = Independent Sample t test (2-tailed), unequal variance assumed.

Significance at P < .05

As depicted in Table 25, there was no significant difference between male and female students in their views of the empowerment of students (Males: M = 4.01, SD = .70; Females: M = 3.97, SD = .62; $t(470) = .496$; P = .487). Furthermore, when the total student empowerment score was disaggregated into two sub-components (involvement in decision making and self-control of misbehavior and learning), there was no significant difference in the mean score of male and female students' views of student empowerment.

B. Student Engagement. The data collection was carried out in terms of three dimensions of student engagement: (a) behavioral engagement (participation in co-curricular activities and positive social relationships), (b) academic engagement and (c) belongingness/affective engagement. Accordingly, the analysis of the data was done within

these a priori set dimensions. For each of these dimensions, however, EPFA was employed to categorize the items in the dimensions into sub-components for the presentation and analysis of data (see Appendix K, Table K2 and Appendix L, Table L1 for details).

i. Behavioral engagement (Participation and positive relationships). Seven items were employed for collecting data of this dimension. Subjecting the data to EPFA produced one component that explains 38.83 % of total variance of the dimension. All items were strongly loaded on the component with factor loadings ranging from .55 to .68 (see Appendix M, Table M2 for details).

Table 26: Students' Perception of their Behavioral Engagement

	Items	M	SD
1.	The school encourage students to participate in co-curricular activities (i.e., different clubs in school)	3.99	1.14
2.	Co-curricular clubs in the school are well functioning	3.69	1.22
3.	Students of the school actively participate in extra-curricular activities	3.73	1.26
4.	In this school, female students are free from harassment by male students	3.89	1.24
5.	In this school, student respect diversity among student population	4.02	1.11
6.	In this school, teachers understand their students and treat them positively	3.88	1.30
7.	In this school, positive relationship exist between teachers and students	3.83	1.24
	<i>Cumulative Mean (CM)</i>	3.86	.76

The behavioral engagement component involves the idea of students' participation and involvement in academic, social, or extracurricular activities (Fredricks & McColskey, 2012; Willms, 2003). To this connection, as shown in Table 26, the students agreed, but with large variability of responses ($SD > 1$), that the school encourage them to participate in co-curricular activities/clubs ($M = 3.99$, $SD = 1.14$), and that students actively participate in

extra-curricular activities ($M = 3.73$, $SD = 1.21$). However, they had less conviction about the well functioning of extra-curricular clubs in their schools ($M = 3.69$, $SD = 1.22$). On the other hand, the data reveal the existence of positive relationship among students and between students and the teachers. The respondent students agreed that students respect diversity among student population ($M = 4.02$, $SD = 1.11$); female students were free from harassment by male students ($M = 3.89$, $SD = 1.24$), teachers understand students and treat them positively ($M = 3.88$, $SD = 1.30$) and that positive relationship exist between teachers and students ($M = 3.83$, $SD = 1.24$).

Similarly, qualitative data from student FGDs indicate the existence of positive social relationship among students. In student FGDs, it was consistently reported that students respect diversity and there was no problem of female student harassment by male students.

ii. Academic engagement. Nineteen items were used in collecting data for assessing the academic engagement of students. Subjecting the data to EPFA produced two components that explain 41.1 % the total variance with the respective shared variance of 34.22% (component one) and 6.88% (component two). See Appendix-N, Table N1 for details. The underlying construct of the first component is *teacher related factors that affect the academic (instructional) engagement of students*, whereas the underlying construct of the second component is the *active involvement of students in learning*, including in classroom instruction and in 1-in-5 collaborative learning group. In deciding order of their shared variance, the components were presented in Table 27 and Table 28 below.

Table 27 below depicts three clusters of teacher-related factors that affect the academic engagement of students: *promoting active learning*, *subject area knowledge*, and *putting high expectation* on students to work hard and providing support to them.

Table 27: Students' Perception of Teacher-Related Factors Affecting Student Academic Engagement

Promoting Active Learning of Students		N	M	SD
1	Your teachers use a variety of active-teaching methods	469	4.06	1.09
2	your teachers use a variety of individual and group work strategies in teaching-learning process	472	4.11	1.15
3	your teachers follow the learning and understanding of each student in a classroom teaching-learning process	471	3.90	1.21
4	your teachers are good at controlling student classroom misbehaviors	472	3.89	1.24
5	Your teachers encourage the active involvement of each student in classroom teaching-learning process	472	3.83	1.29
<i>Cumulative Mean (CM)</i>		468	3.96	.80
Teachers' Subject Area Knowledge		N	M	SD
1	Your teachers have the ability (knowledge) in their subject area they teach	472	3.84	1.23
2	Your teachers have the ability to explain new concepts in the lesson as easily as possible	472	3.76	1.24
3	Your teachers have the ability to explain new concepts in the lesson by taking clear examples	472	3.85	1.22
<i>Cumulative Mean (CM)</i>		472	3.82	.99
High Expectation and the Support of Teachers		N	M	SD
1	Year teachers have high expectations on students to work hard for high academic achievement	472	3.99	1.18
2	Teachers support academically 'low achieving students' to enable them improve their academic achievement	472	3.71	1.29
3	Teachers give special support to needy female students to enable them improve their academic achievement	472	3.80	1.27
4	Teachers are well committed to providing guidance to 1-in-5 learning group of students	472	3.95	1.18
5	Teachers are well committed to the follow up of 1-in-5 learning group of students	472	3.81	1.22
<i>Cumulative Mean (CM)</i>		472	3.85	.87

Academic engagement is about student engagement during instructional time and with instruction-related activities and it is defined as student's level of investment in learning (Yazzie-Mintz, 2009). In this regard, data in Table 27 reveal the positive presence of each of

the three teacher-related factors affecting student classroom (instructional) learning. However, the relatively large standard deviations (i.e., $SD > 1$) for the items in Table 27 indicate a relatively large variability in the respondents' responses with respect to the mean score.

With regard to teachers' use of active teaching method, students agreed, but with relatively large variability of responses, that their teachers use a variety of active-teaching methods ($M = 4.06$, $SD = 1.09$), follow the learning and understanding of each student in a classroom teaching-learning process ($M = 3.90$, $SD = 1.21$), encourage the active involvement of each student in classroom teaching-learning process ($M = 3.83$, $SD = 1.29$); and the teachers were good at controlling student classroom misbehaviors ($M = 3.89$, $SD = 1.24$).

With regard to subject area knowledge, students had positive perception of the subject area knowledge of their teachers ($CM = 3.82$, $SD = .99$). They agreed, but with relatively large variability of responses, that their teachers have the ability (knowledge) in the subject area/the subject matter they teach ($M = 3.84$, $SD = 1.23$). They also believed that their teachers have the ability (knowledge) to explain new concepts in the lesson as easily as possible ($M = 3.76$, $SD = 1.24$) by taking clear examples ($M = 3.85$, $SD = 1.22$).

Moreover, the student respondents agreed that their teachers put high expectation on students to work hard as well as provide support to them ($CM = 3.85$, $SD = .87$). In particular, they agreed that their teachers have high expectations on students to work hard for academic achievement ($M = 3.99$, $SD = 1.18$). Besides, they agreed, but with relatively large variability of responses ($SD > 1$), that teachers have been providing support to academically low achieving students ($M = 3.71$, $SD = 1.29$) in addition to providing special support to female students ($M = 3.80$, $SD = 1.27$). Furthermore, respondents agreed, with relatively large variability of responses ($SD > 1$), that their teachers were well committed to providing

guidance to 1-in-5 collaborative learning group of students ($M = 3.95$, $SD = 1.18$) and to the follow up of the learning of students in the 1-in-5 collaborative learning group ($M = 3.81$, $SD = 1.22$).

However, students in all of the focus group discussions (FGD-1, FGD-2, FGD-3, ... FGD-8) remarked that, except a few, the majority of students lack learning motivation. Many teachers give tutorial classes by grouping students into three ability groups but only few students attend the tutorial classes. In student FGD of School 3, it is pointed out that low learning ability students are not comfortable with ability based tutorial. They pointed out that students in the low learning ability group are ashamed of coming to attend the tutorial class. In fact, the larger proportion of students in such group is females.

In almost all of the focus group discussions, students pointed out lack of confidence to succeed at Grade 10 National Examination as a factor for the low motivation of students. Besides, in some FGDs (FGD-6, FGD-7, and FGD-8), students mentioned peer influence towards bad habits (such as observing films, having boy/girl friend, and to give priority for leisure/recreation to education) as a factor adversely affecting student learning motivation.

Indeed, some teachers (T9, T11, and T13) and students (FGD-3, FGD-5, FGD-6, and FGD-7) mentioned parents' labor demand or economic problem as a factor for student absenteeism from tutorial classes. Furthermore, students (FGD-1, FGD-2, and FGD-3) mentioned the interest/attention that students have for the subject and the ability of the teacher giving the tutorial as factors affecting student absenteeism from tutorial classes.

Table 28: Students' Self-Report of their Active Involvement in Classroom Learning

	Items	N	M	SD
1.	You pay attention to understand when the teacher teaches	470	4.20	1.11
2.	You have active involvement in group discussions in classroom	469	4.12	1.10
3.	You have active involvement in asking and answering questions in classroom learning	472	4.10	1.15
4.	You feel free to ask and answer question in classroom learning	472	4.08	1.16
5.	You like learning in 1-in-5 learning group	470	4.10	1.16
6.	Studying in 1-in-5 learning group has helped you to understand the subject matter and improve your test scores	472	4.03	1.24
	<i>Cumulative Mean (CM)</i>	<i>469</i>	<i>4.10</i>	<i>.76</i>

The cumulative mean score of students' self-report data for the items in Table 28 indicate that students in model secondary school of Oromia Regional State have active involvement in their learning, including in classroom instruction and in 1-in-5 collaborative learning group (CM = 4.10; SD = .76).

Nevertheless, a relatively large variability of student responses with respect to the mean score was evident from the relatively large standard deviations in students' responses to items in Table 28. Respondent students agreed, but with relatively large variability of responses (SD >1), that they pay attention to understand when the teacher teaches (M = 4.20, SD = 1.11), had active involvement in group discussions in classroom (M = 4.12, SD = 1.10), and in asking and answering questions in classroom learning (M = 4.10, SD = 1.15). Similarly, they agreed, but with a relatively large variability of responses (SD >1), that they like learning in one-in-five collaborative learning group (M = 4.10, SD = 1.16) and that studying in 1-in-5 collaborative learning group has helped them to understand the subject matter and improve their test scores (M = 4.03, SD = 1.24).

Interview data from teachers, school principals and student FGDs reveal lack learning motivation (i.e., lack of concern to learning, attention, and hard work) among the

overwhelming majority of students. For instance, the interview teacher of school-8 described that:

The teachers as well as the school is doing a lot to empower students; but, the frustrating thing is the low internal motive of students for learning; only a limited number of students have interest for high academic achievement and self-actualization through education (T16).

Similarly, the interview teacher of School 7 expounded that:

The interest/motivation that the majority of students have for education is low; only a few students (small proportion) have motivation in learning they do not attend tutorial classes, do group works and assignments, and actively participate in classroom teaching learning process (T13).

The interview teacher (T5) of school-5 pointed out that:

It is impossible to say that motivation for learning existed among all students; only a few students have learning motivation for better academic success....the others, who learn only to promote from class to class simply to complete secondary education, have low learning motivation; it is difficult to precisely state the causes for low learning motivation of students for it is an intricate issue (T5).

The principal of School 2 described the low learning motivation of students in his school as:

The learning motivation of a few students is good; however, the learning motivation of the majority of students is low they do not use library, do not do assignments, do not attend tutorial classes; teachers give tutorial by dividing students in different ability groups but only a few students attend the tutorial classes

Teachers (e.g., T5, T9, T15, and T16) contended that the problem of low learning motivation student is acute, nationwide and an issue at stake; and they suggested the need for national concern and research.

For most teachers (T1, T2, T3, T4, T9, T10, T11, T12, T13 and T15) and school principals (P1, P2, P5, P6, and P7) the major cause of students' low motivation in learning is the lack of aspiration, partly as the result of the current unemployed graduates observed in the society. Furthermore, some teachers mentioned the internet and the mobile phone technology, poor academic background (T9, T15) as factor adversely affecting student learning.

iii. Affective/Identification engagement. Three items in table 28 below were employed for collecting data on affective/identification engagement of students with their school for better learning. Subjecting the items to EPFA was produced one component that explains 62% of the total variance. The commonalities of the items were .67, .70, and .55 respectively and the item loadings on the component were .89, .84, and .74 respectively, revealing that the items entirely measure the same underlying component that is, student affective/identification engagement.

Table 29: Students' Self-Report of their Affective Feeling/Identification with School

	Items	N	M	SD
1.	You appreciate the effort of your teachers in the school to enable students understand the subject matter they teach	472	3.88	.98
2.	You appreciate the effort of this school to improve student learning and academic achievement	472	3.92	1.23
3.	You appreciate the orderly (disciplinary) climate in this school	472	3.83	1.22
	<i>Cumulative Mean (CM)</i>	472	3.88	.98

Affective/emotional component of student engagement is the extent to which students identify with their school and feel they belong. It is an internal state that mediates a wide range of achievement and behavioral outcomes of students (Leithwood & Jantzi, 2000). As

cumulative mean score of student responses to items in Table 29, the affective feeling/identification of students with their school was good (CM = 3.88, SD = .99). Students had good appreciation for the effort of the teachers to enable students understand the subject matter they teach (M = 3.88, SD = .98). In addition, they had good appreciation for the effort of their school to improve student learning and academic achievement (M = 3.92, SD = 1.23). Moreover, students had good appreciation for the orderly (disciplinary) climate in their school (M = 3.83, SD = 1.22).

Table 30 below depicts the comparison between male and female students' view about student engagement (behavioral, academic, and affective engagement).

Table 30: Comparison of Male and Female Students' Perception of Student Engagement

Scale and Subscales	Males (n = 252)		Females (n = 209)		Sig ^a		
	M	SD	M	SD	t-value	df	P
1. Behavioral Engagement (Participation and Social Relations) subscale [7 items]	3.89	.77	3.84	.75	.730	459	.466
2. Academic Engagement sub- scale [19 items]	3.98	.68	3.93	.71	.780	459	.436
Teacher Related Factors' (use of active teaching method, subject knowledge, high expectation and support) [13 items]	3.88	.75	3.89	.78	-.064	459	.949
Active Involvement of student in learning [6 items]	4.19	.74	4.02	.75	2.466	459	.014
3. Affective/Identification Engagement subscale [3 items]	3.85	.99	3.93	.96	-.895	459	.371
Aggregated Engagement for the three dimensions [29 items]	3.94	.67	3.94	.68	.591	459	.554

Note. Sig^a = Independent Sample test (2-tailed); equal variance assumed (P values for Leven's test for equality of variance was not significant, P > .05).

Significance level at P < .05

As shown in Table 30, there was no significant difference between male and female students in the aggregate (total) perception of student engagement (Males: M = 3.94, SD = .67; Females: M = 3.94, SD = .68; P = .554). Even, when the aggregate score was disaggregated into the three dimensions of student engagement (behavioral, academic, and affective), there was no significant difference between male and female students in their perception of student engagement on each of these three dimensions.

II. Engagement of Parents/Community

Table 31: School Principals and Department Heads' View of the Engagement of Parents/Community

	Items	SPs ^a		DHs ^b	
		M	SD	M	SD
1.	PTA works with enthusiasm (interest) for the improvement of the school	4.52	.60	4.07	.88
2.	PTA have active involvement in the leadership/management of the school	4.52	.51	4.10	.84
3.	PTA have strong a sense of shared responsibility to ensure sustainable school improvement	4.33	.58	3.96	.77
4.	Parents follow the learning of their child	3.81	.93	3.37	1.18
5.	Teachers are willing to communicate with parents about the child's learning/behavior in school	4.19	.40	3.87	.94
6.	To the extent of their capability, the local community/parents are willing to support the school in cash, in kind, or in labor	4.10	.70	3.84	.90
7.	The school persistently makes regular communication with parents/community	3.71	1.10	3.78	.97
8.	Parents have adequate interest to attend parent/community forums/programs of the school	3.52	1.12	3.37	1.15

Note. SPs^a = School Principals; (N = 21) DHs^b = Department Heads (N = 67).

Data in Table 31 show that PTAs in model secondary schools performs their duties with good commitment. Both groups of the respondents (school principals and department heads) agreed that PTA is working with enthusiasm (interest) for school improvement (M = 4.52; 4.07), have active involvement in the management/leadership of the schools (M = 4.52; 4.10). Besides, both groups of the respondents agreed that PTAs in the schools have strong sense of shared responsibility to ensure sustainable school improvement (M = 4.33; 3.96). However, data in the same table indicate that parents' follow up of their child's learning at school was not satisfactory (M = 3.81; 3.37), although teachers were willing to communicate with

parents about the child's learning/behavior in school (M = 4.19; 3.87). On the other, the respondents generally agreed that the schools have been making regular communication with parents/community on a persistent manner (M = 3.87; 3.78); however, parents lack interest to attend parent/community forums/programs of the school (M = 3.52; 3.37). Nevertheless, both categories of the respondents contended that the local community/parents are willing to support the school to the extent of their capability labor in cash, in kind, or in kind (M = 4.10; 3.84).

In almost all of the schools, the school principals acknowledged the strength and the commitment of PTA as one of the major factors for their success in school improvement. Above all, the school principals as well as the interview PTAs were stressed the contribution of PTA in securing financial support to school from the parent and/or the community.

In the case of this school, PTA commitment was good; it follow up the teaching learning of students, make discussion forums with parents about student learning, advice students and take disciplinary measures on misbehaving students and teachers, make discussion with the larger community with regard to school improvement and community support to school, and as a result, the community was recently contributed 35, 000 birr for the construction of laboratory (P2, School 2).

The chair person of the PTA of the school (School 2) expounded the PTA's commitment as:

PTA is working well in discharging the responsibilities expected of it; PTA has big responsibility of safeguarding peace in school and promoting school-community relations; In this regard, it has been making day-to-day follow up of peace in the school since 2004; PTA had regular meetings of two times per month to discuss the strengths and weaknesses in the implementation of school improvement initiatives and student learning, especially about student absenteeism and dropout (PTA-3).

For the principal of School 5, the commitment of PTA was very good; and he contended that the success of the school is credited to the commitment of the PTA. To this connection, the PTA chair expounded the commitment of PTA as:

As much as possible, the PTA has been diligently discharging its responsibilities, for instance, advising students and ensuring disciplinary climate of school, holding discussion with the parents to contribute to school improvement, partaking in school improvement planning and financial appropriations to different programs and activities of the school, and make the follow up of the proper implementations of financial decisions (PTA-5).

4.2.5. Human, Financial and Physical Resource Facilities of the Schools

At the most basic level, capacity of an organization involves physical input resources, or hard capacities, such as infrastructure, technologies, financial resources, and personnel (Davies, 2009, Harris, 2001). There is evidence, especially from recent experimental studies, that sufficient resources are necessary if education of acceptable quality is to be attained, and that well-implemented increases in resources are an important means of improving educational quality in developing countries (EFA, 2005: 78).

From this vantage point, the availability and adequacy of the human, financial and physical facilities of the schools were discussed.

A. Human Resources Capacity (Teachers' competence and commitment). Ten rating items were employed for collecting data on quality of teachers (competence and commitment). Subjecting the items to EPFA (Eigen value greater than one, direct Oblimin rotation) was produced two principal components, with seven of the items strongly loaded on the first component and three items on the second component. The two components explain 52.81% of the total variance with a respective shared variance of 35.56% (component one) and 17.25% (component two). The underlying construct of component one was *professional*

competence of teachers (subject area knowledge and pedagogical skills) and the underlying construct of the component two was *teachers' commitment for sustainable school improvement* (see Appendix-N, Table N2 for details).

In order of their respective shared variance, the analysis of data was presented in Table 32 and Table 33 below.

Table 32: School Principals and Department Heads' View of Teachers' Professional Competence

Items	SPs ^a		DHs ^b		Z	Sig ^c
	M	SD	M	SD		
1. Almost all teachers are qualified to teach at secondary school level	4.33	.86	4.19	.94	-.57	.57
2. Teachers have adequate knowledge in the subject area they teach	4.33	.58	4.16	.86	-.45	.65
3. Teachers have adequate pedagogical competence for effective teaching	4.10	.44	4.06	.78	-.15	.89
4. Teachers have the ability (knowledge and skill) to evaluate the curriculum in their subject area	4.00	.45	4.03	.82	-.70	.49
5. Teachers have the ability to produce supplementary teaching materials in their subject area	3.90	.54	4.16	.69	-1.75	.079
6. Teachers have the ability to conduct action research to solve practical problems	3.24	1.04	3.82	.98	-2.25	.024
7. Teachers have the ability to use different active teaching methods	3.95	.59	4.34	.64	-2.58	.010
<i>Cumulative Mean (CM)</i>	<i>3.98</i>	<i>.37</i>	<i>4.11</i>	<i>.55</i>	<i>-1.26</i>	<i>.207</i>

Note. SPs^a = School Principals (N = 21); DHs^b = Department Heads (N = 67); Sig^c = Mann-Whitney U Test; Significance level at P < .05

As shown in Table 32, both categories of respondents (school principals and department heads) confirmed that teachers in model secondary schools of Oromia Regional State had adequate professional competence in subject area knowledge and pedagogical skills

(CM = 3.98; 4.11). Expressed specifically, the respondents asserted, with no significant difference, that the teachers were qualified to teach at secondary school level (M = 4.33; 4.19); teachers have adequate subject knowledge (M = 4.33; 4.16) and pedagogical competence (M = 4.10; 4.06). Furthermore, the respondents agreed that teachers have the ability (knowledge and skill) to evaluate the curriculum in their subject area (M = 4.00; 4.03) and to produce supplementary teaching materials (M = 3.90; 4.16).

Moreover, the respondents agreed that teachers have the ability to use different active teaching methods (M = 3.95; 4.34). To this end, departments heads had strong conviction than do the school principals that teachers have the ability to use different active teaching methods ($P = .010$, $\eta^2 = .27$). Indeed, the respondents had small significant difference in their perception of teachers ability to conduct action research ($P = .024$; $\eta^2 = .24$). While the school principals were neither agreed nor disagreed that teachers have the ability to conduct action research to solve practical problems (M = 3.24, SD = 1.04), the department heads generally agreed that teachers have the ability to conduct action research to solve practical problems (M = 3.82, SD = .98).

In the qualitative interview with teachers and school principals, no scarcity of qualified teachers was reported, except for ICT education. Attrition and scarcity of ICT graduates to apply to teaching profession was the problem in the schools. Consequently, ICT education teachers in the schools were mostly diploma graduates. The problem of teacher attrition was reported in two schools (School 3 and School 4), which are found in remote rural areas.

Furthermore, several interview teachers (T1, T3, T6, T16), school principals (P1, P3), and supervisors (SP3, SP7) mentioned the problem of novice teachers' lack of competence in pedagogy, subject area knowledge and lack of identification with teaching profession.

On the other hand, the inadequacy of administrative personnel (e.g., laboratory technicians, library attendant, and store keeper) was reported. As the participants reported,

the problem of inadequacy of administrative personnel was due to lack of budget for recruitment (e.g., School 5, School 6), or due to attrition and the absence of applicants to the position because of the unattractive salary (e.g., School 5, School 4).

Table 33: School Principals and Department Heads' Rating of Teachers' Commitment to Sustainable School Improvement

Items	SPs ^a		DHs ^b		Z	Sig ^c
	(N = 21)		(N = 67)			
	M	SD	M	SD		
1. Teachers in this school work with fairly high professional commitment to ensure sustainable school improvement	4.14	.36	4.22	.74	-.91	.364
2. Teachers work with fairly high morale to realize the objectives and targets of school improvement plan	4.14	.48	4.03	.92	-.04	.969
3. Teachers work with fairly high energy to realize the objectives and targets of school improvement plan	4.29	.56	3.94	1.00	-1.21	.226
. <i>Cumulative Mean (CM)</i>	<i>4.19</i>	<i>.36</i>	<i>4.06</i>	<i>.73</i>	<i>-.43</i>	<i>.662</i>

Note. SPs^a = School Principals; DHs^b = Department Heads; Sig^c = Mann-Whitney U Test.

Significance level at $P < .05$

McIntyre (2010) remarked, teachers matter for they have the capacity to mitigate the effects of environment on student learning outcome and open greater possibility for student success. In this regard, the quantitative data in Table 33 suggest that teachers in the schools understudy have fairly high professional commitment, morale and energy (CM = 4.19; 4.06). Both categories of respondents (school principals and department heads) agreed, with no significant difference, that teachers had been working with fairly high professional commitment to ensure sustainable school improvement (M = 4.14; 4.22). Furthermore, they agreed that the teachers were working with fairly high moral (M = 4.14; 4.03) and fairly high energy (M = 4.29; 3.94) to realize the objectives and targets of school improvement plan.

In contrary to quantitative data, the qualitative interview data reveal lack of motivation and commitment/devotion on the part of the majority of teachers. The interview teachers (T2, T5, T8, T11, T12, T13, T15, and T16) expounded that the majority of teachers lack motivation and commitment to sustainable school improvement. For them teachers' low motivation and commitment for sustainable school improvement emanated from the low attention and respect that the government and the society give to teachers and teaching profession.

Although it is not possible to say high or low, teachers have medium level of commitment; there existed many problems affecting teachers' work motivation and commitment; each individual might have his/her own feeling; nevertheless, although there are many problems, teachers are working with good motivation with regard to improving the academic achievement of students (T9).

This teacher went on expounding the major factors adversely affecting teachers' work motivation and commitment for sustainable school improvement, saying that:

. . . for example, the economic problem low salary of teachers and the absence of incentive; while teaching is more challenging work, teachers life standard is low as compared to those with qualification and service year in other public institutions. The government has underestimated value for teachers and teaching profession and, consequently, the society/community, too, has under estimated value for teachers (T9).

In the same vein, interview teacher (T12) of School 6 described that "only few teachers have commitment and the majority of teachers have low work motivation." He expounded the causes of low work motivation and commitment of teachers as:

Teachers have no source of income other than salary; the government attention and respect to teachers and teaching profession was low; there were no incentives to

subsidize the low living standard of teachers; the society have low respect to teachers simply because of the low income and the low living standards of teachers in the society. . . .Today, you shy of your being a teacher; you shy of introducing yourself that you are a teacher (T12).

Similarly, interview teacher (T15) stated that:

Teachers' work motivation was very cool, especially among the young teachers (add on postgraduate teachers). If you ask any such teacher he/she would say "I am teaching to live, not because I like teaching and teaching profession" (T15).

What is the source of teachers' lack of motivation? Is it the work itself? Or other things exist? He replied:

It is not the work itself; it is the low attention and respect that the government and the society give to teachers. Nowadays, any section of the society lacks respect for teachers and teaching profession (T15).

Why did the society/community lack respect for teachers?

I think this is related to low income and living standards of teachers in the society; teachers' salary is low, teachers have no incentive or source of income other than salary so that teachers does not have house and beautiful house furniture (T15).

Likewise, school principals and supervisors expressed their conviction that low respect of the society, inadequate salary and lack of incentives to subsidize the low income and low living standard of teachers were the major source of dissatisfaction and lack of commitment/devotion on the part of teachers.

B. Financial Resource Capacity of Schools: Transforming schools into places for learning of students and adults (teachers) requires huge financial investment. To this connection, Table 34 below portrays School Principals and Department Heads' response regarding financial resource capacity of the schools.

Table 34: School Principals and Department Heads' View of Financial Resource Capacity of Schools

Items	SPs ^a		DHs ^b		CoM ^d	Z	Sig ^c
	M	SD	M	SD			
1. The government provide the school with adequate financial support/budget	3.47	1.06	3.46	1.21	3.46	-.77	.443
2. The local community/parents have good economic capacity to support the school in cash	3.42	1.07	3.28	1.28	3.31	-.99	.322
3. The school have good income generation capacity from within-school	3.95	.92	3.52	1.16	3.63	-1.44	.149

Note. SPs^a = School Principals (N = 21); DHs^b = Department Heads (N = 67); Sig^c = Mann-Whitney U Test; CoM^d = Combined Mean of the School Principal and Department Heads' Rating Score.

Significance level $P < .05$

As shown in Table 34, item 1, school principals and departments agreed, but with relatively large variability of responses ($SD > 1$), that the schools have good income generation capacity ($M = 3.63$). Nevertheless, both groups of respondents neither agreed nor disagreed that the government provide them with adequate financial support/budget. Indeed, they neither agreed nor disagreed that the local community community/parents have good economic capacity to support school in cash. But, in both response cases (government support/budget and local community/parents economic capacity) the relatively large standard deviations ($SD > 1$) indicate relatively large variability of responses with respect to the mean scores. However, the interview data from school principals and supervisors made it clear that there was financial constraint problem in the schools.

In all of the schools, the interviews (school principals and supervisors) mentioned financial constraint as one of the major challenges for sustainable school improvement. The principal (P3) of School 3 remarked that:

The financial source from other sources (block grant, internal income, and community contribution) is very small. It is financial source from school grant that

covered much of the financial needs of the school. Nothing can be achieved if school grant is absent (P3).

The school principals and supervisors complain that the government money allotted to schools by the local Education Administration Authority had been insignificant that it would have not been possible to achieve little in the school improvement program if there was no school grant and parent/community contribution.

There is problem in recurrent budget allotment to schools by the local administration authority. School budget appropriation per student is different across different district/municipalities. The more the school secured financial income from the local community and internal income source, the lesser the financial support from the local education authority. To this end, the worst cases reported were School 5 and School 6 where there was almost no budget to schools from the local Education Authority, except for salary of teachers.

The principal of School 5 said that “the main financial source of the school has been internal income and the Government block grant is too small.” The principal of school-6 maintained the same idea to the principal of School 5. He contended that the financial source is not enough to accomplish the school improvement program to the expected level of performance. He said that “the issue of block grant from government budget was very difficult; there was no allotted block grant to the school yet”. The supervisor of the same school expounded that because the Town Administration was built recently (only two years), there was a problem of budget and the main source of finance was the community contribution.

The better case reported was School 3, which has been receiving a substantial amount of budget from the local Education Authority that was considered the current purchasing power of birr. Basically, the cause of the differences in the amount of recurrent budget allotment to

schools among the local Education Authorizes is related to the 2002 government guide line for recurrent budget appropriation to schools, which was 20 birr per student for secondary school. The guide line was not revisited for more than a decade despite an increased rate of inflation in the price of goods by more than four folds. Twenty birr amounts about 4 dollars in 2002 and it is less than one dollar this time.

Furthermore, the school principals and supervisors complain that the school grant comes around the end of academic year, often in the fourth quarter of the budget year. Besides, its amount fluctuates from year to year, sometimes high (up to 90 birr per student) and sometimes low (up to 45 birr per student).

C. School Physical Facilities.

Table 35: Students' Rating of the Adequacy of School Physical Facilities

	Items	Males (n = 253)		Females (n = 216)		CoM ^b	Sig ^a
		M	SD	M	SD		
1.	The school provides students a satisfactory laboratory for experimentation	3.31	1.38	3.65	1.30	3.46	.007
2.	The school provides students adequate reference books in the library	3.91	1.32	3.81	1.25	3.86	.402
3.	The school provides students a satisfactory library service	3.99	1.24	3.95	1.23	3.96	.707
4.	The school provides students with satisfactory toilet facility for boys and girls	3.76	1.37	4.02	1.20	3.88	.031
5.	Each student in this school has text book for each subject	4.01	1.23	4.19	1.08	4.09	.087

Note. Sig^a = Independent Sample t test (2-tailed), equal variance not assumed; CoM^b = Combined Mean of Male and Female students' rating score.

Significance at P < .05

As shown in Table 35, except for laboratory service (CoM = 3.46), students agreed that their school is providing them with satisfactory physical facilities, including adequate

reference books in library (CoM = 3.86), satisfactory library service (CoM = 3.96) as well as a satisfactory latrine service (CoM = 3.88) and text book for each subject (CoM = 4.09).

However, there was a small significant difference between male and female students' view with regard to the schools' provision of laboratory service/facility, $t(463) = -2.72$, $P = .007$; and $\eta^2 = .016$. While male students generally hold a neutral position (neither agreed nor disagreed) that the school provides them with satisfactory laboratory service/facility ($M = 3.31$, $SD = 1.38$), female students were somehow agreed ($M = 3.65$, $SD = 1.30$; $t(463) = -2.72$, $p = .007$; $\eta^2 = .016$). In item 4 of the table, although both male and female respondents generally agreed that the school provided them with adequate toilet facility ($M = 3.76$, 4.02 respectively), male students expressed less satisfaction with toilet facility as compared to female students, $t(467) = -2.16$; $P = .031$; $\eta^2 = .010$.

From the qualitative data through observation, it is impossible to say that rural district town schools (School 1, School 2, and School 4), except one school (School 3), had staffroom/lounge. In the name of staffroom, there existed small classrooms often with two to three chairs. In these schools (including School 3), there was no satisfactory library with adequate reference books. Furthermore, there were no up-to-standard laboratory rooms although the availability of chemicals and apparatuses were often reported adequate. As laboratory rooms, one would find small size rooms inconvenient for demonstration of an experiment by the teacher. Due to lack of laboratory technicians, the laboratories were not well functioning and, therefore, there was no well laboratory supported learning in the schools.

On the other hand, schools (School 5, School 6, School 7, and School S8) in urban administrative towns had good staffroom with cabinet, chairs or sofa, and television. These schools had better library and laboratory services to students. School 8 was most equipped school compared to the others. Indeed, interview teacher (T16) of the school, who was the

member of the committee assessing the physical facilities/infrastructure of the school, remarked that the school was of a “medium standard” as per the standards/bench marks from the Regional Education Bureau.

In all schools there was tap water although only two or three taps were pouring water and many were not functioning. Indeed, all schools had separate latrine for boys and girls although the quality as well as the sanitation were often poor and had no water supply for washing hand after using latrine. Furthermore, shortage of computer and lack of maintenance of the existing computers in some schools (e.g., School 1, School 2, and School 4) was reported in student FGDs.

4. 2.6. Major Challenges for Sustainable School Improvement

Six major themes of challenges (capacity gaps, problems) were emerged from the analysis of open-ended interview data collected from key informants (school principals, teachers, supervisors, PTAs, students and practicing researcher observation).

A. Problems related to school-based learning of teachers. Learning of teachers is at the heart of school capacity and capacity building for sustainable improvement. To this end, although school-based CPD of teachers was carried out in the schools its accomplishment and effectiveness was hampered by several problems. These include:

i. Lack of interest/enthusiasm on the part of senior teachers. Qualitative interview data collected from school principals, school supervisors and informant teachers revealed lack of interest/enthusiasm on the part of senior teachers.

School principals, school supervisors and almost all interview teachers persistently expressed that senior teachers in general and those who completed career development stage and near to pension retirement in particular, tend to avoid school-based CPD for they feel that it has nothing to do to their career development, or accrues them any personal benefit.

Senior teachers contend that “CPD has no use or add nothing to the improvement of teachers’ professional competence (the acquisition of knowledge and skill) apart from making teachers busy; nevertheless, these teachers were carrying out CPD, except two (P3).

The principal of School 7 states that:

It is impossible to say that teachers have good attitude towards school-based CPD, they argue against it from several grounds such as shortage of time. As stated in the guide line, CPD is a criterion for professional licensing; Thus, senior teachers near to retirement argue that CPD should not be their concern for it has no pay-off for them (P7).

Similar to the school principals, the school supervisors expressed that that senior teachers, in general, have unfavorable feeling about school-based CPD and those who completed career development ladder had negative attitude, especially those near to retirement in particular had not been doing it. For instance, supervisor of School 5 stated that “apart from negative attitudes by the majority of senior teachers and the refusal by those who had completed career development ladder, the others are doing CPD”. To this end, the analysis of quantitative data by disaggregating into Career Stages (i.e., seniority of teachers) supports the qualitative data (P-value for one-way ANOVA = .001, $\eta^2 = .051$).

Post-hoc test using Tukey’s Honestly Significant Different test (HSD) confirmed that teachers at Higher Level Career Stage and Middle Level Career Stage have less favorable attitude for school level CPD practice as compared to teachers at Lower Level Career Stage. Stated in other words, teachers at Lower Level Career Stage have more favorable attitude for school level CPD practice than do senior teachers at Middle Level Career Stage (P = .042) and at Higher Level Career Stage (P < .0001).

ii. Lack of understanding and know-how of the current school-based CPD. Interview data of interview teachers (e.g., T1, T2, T3, T6, T8, T12, and T13) reveal that teachers lack adequate knowledge and understanding about the current school-based CPD practices. There was no consensus about the purpose and the practices that constitute the current school-based CPD. Indeed, teachers' lack of the know-how of planning, evaluating and reflecting on the impact of the practices or actions was pointed out by several interviews.

For many teachers, school-based CPD is about the learning of teachers that is, what teachers need to know/learn to fill the knowledge and/or skill gap to ensure better student learning and learning outcome, but not .duties/tasks that teachers need to do in order to improve student academic achievement (e.g., giving tutorial, preparing supplementary teaching materials, and counseling female students). For others, school-based CPD is additional tasks/duties that teachers need to carry out to improve student learning outcome/academic achievement. Besides, some school supervisors (e.g. SP3, SP5) have blurred conception about whether or not it is appropriate to regard the aforementioned duties/tasks that teachers need to carryout to improve student academic achievement as elements of school-based CPD practices. To this connection, school supervisors (SP3, SP5) complain for the absence of blue-print guide regarding school-based CPD practices: what practices it constitutes, the planning, evaluation and reflection on CPD practices. To this end, the relatively more experienced supervisor (SP3) stated that “although there was training on the concept of school-based CPD for general understanding of the concept, we do not have adequate knowledge and understanding about it.”

iii. Inconsistent focus from the Local Education Administration Office. Teachers complain that the attention given to school-based CPD is inconsistent; and the current practice of school-based CPD practice was solely left to school with little support and guidance from the local education administration office (e.g., T9, T12, T15, T16).

Formerly in the past years, there was good attention to school-based CPD: there were workshops and awareness creation; there were booklets to guide CPD and we used to discuss on these booklets; Now days, however, the attention to CPD from the Local Education Administration bureau become low; the bureau is silent regarding school-based CPD of teachers (T15).

Similarly, the other teacher in the same school expounded:

If carried out properly school-based CPD is of course useful; the problem is from the concerned government bodies; there was no continuity of focus to CPD; there was no continuity of focus to school-based CPD; the focus changes from time to time; Today, CPD is left to the school office only (T16).

iv. Indulgence and superficial performance. The complaint in this case was lack of serious follow up of teachers' actual performance vi-sa-vis the actual CPD plan by the teacher. Often, teachers plan for school-based CPD practice and break down the CPD practice and hours in terms of weeks and months in the semester and the year. However, there was no attention to the actual performance accomplishment and the quality of the performance. Interviews pointed out as follows.

CPD is planned, some teachers try to diligently implement the plan and others are not; yet, other teachers did not have the understanding and know-how of CPD (T1); CPD is weak in this school; teachers prepare CPD plan but they rarely implement; no portfolio of CPD; and teachers are evaluated on the basis of the plan itself regardless of the implementation and portfolio (T8); Teachers plan and perform CPD but there was problem in the quality of performance; teachers overlook school-based CPD (T13).

Similarly, the principal of School 7 remarked that:

Teachers' lack interest for school-based CPD is the major challenge for effective accomplishment of school-based CPD. Due to lack of follow up by some department heads and the CPD committee, doing and reporting the CPD around the end of the semester was evident on the part of teachers. Some teachers copy from the last year CPD or from other teacher (P7).

V. Misplaced purpose of Action Research undertaking. School principals, teachers and supervisors were mentioned that many senior teachers have been doing action research as part of school-based CPD practice. However, these action researches were rarely focused on solving practical problems. The focus was on doing the action research per se irrespective of its application to solve practical problems. A teacher (T15) in school-8 stated that “action research has been carried out by teachers but none was implemented and discussion was held on the impact of the action in solving practical problem.”

Similarly, the supervisor of School 3 stated the following.

Some teachers do action research. Currently, six teachers are doing action research. One teacher completed it and the remaining five are expected to complete. However, teachers do action research not to deeply search in the cyclic process solve practical problems and to reflect on practice. Rather, teachers conduct action research for its credit in their performance appraisal.

B. Lack of commitment/devotion on the part of the majority of teachers. In almost all schools under the study, the interviews (teachers, school principals and school supervisors) pointed out that the majority of teachers lack commitment/devotion to work hard for sustainable school improvement. They trace the source of low commitment/devotion to the low attention and respect that the government and the society give for teachers and teaching profession. In addition, teachers stated that the low learning motivation of students as a factor adversely affecting teachers' motivation to work hard.

C. *Low learning motivation of students.* Teachers, school principals and students contended that the majority of students have low learning motivation as their aspiration is just to complete secondary education as opposed to proceeding to preparatory and higher education. Students' lack of learning motive is evident in their low interest of attending tutorial classes and in the 1-in-5 collaborative peer-learning group. Many interview teachers and student asserted that 1-in-5 collaborative peer learning group is promoting dependency in student learning for most of the low and average learning ability students depend on the top ones in doing group assignments/projects.

D. *Availability and adequacy of physical facilities and materials.* In rural district town schools (School 1, School 2, School 3, and School), there was no satisfactory library, or no laboratory (e.g., School 2), or no up-to-standard laboratory although the availability of chemicals and apparatuses were often reported adequate. Due to lack of laboratory technicians, the laboratories were not well functioning and, therefore, there was no well laboratory supported learning in the schools. Besides, students complained for shortage of computers and lack of maintenance to non-functioning computers.

E. *Financial constraint.* Almost all of the schools, the school principals, supervisors as well as many of the interview teachers mentioned financial constraint as one of the major challenges for sustainable school improvement. The government budget (block grant) allotted to schools by the local Education Administration Authority were insignificant and the appropriation per student was different across different districts/municipalities.

F. *Gap in building sustainable leadership capacity.* Unlike school principals, the deputy principals lack training for leadership position. Moreover, some participants pointed out the problem of attracting experienced and competent individuals to school leadership positions. To this effect, one explicit embedding factor is that the pay-off of the position was not enticing to able and experienced teachers in higher career ladder (e.g, higher teacher, lead

teacher, higher lead teacher). Furthermore, interview teachers doubt the selection and appointment of school principals is solely merit-based.

4.2.7. Progress in Student Academic Achievement in the Past Four Consecutive Years

Table 39 below shows the number of students who took Grade 10 National Examination, Pass Rate (PR) in percent with a Grade Point Average of 2.00 and above, PR in percent to Grade 11 (PR to G-11), and number of students who scored Grade Point Average of 4.00 (GPA 4.00) in the past four consecutive years (2012 to 2015) for five Schools (S1, S2, S3, S4, S5 & S6).

Table 36: Progress in Student Achievement at Grade 10 National Examination in Four Consecutive Years (2012-2015)

Schools	2012	2013	2014	2015
S1 Exam. Takers	739	736	879	926
PR (GPA 2.00 & above)	67.25%	53.80%	64.16%	76.24%
PR to Grade 11	44.51%	20.51%	22.15%	34.77%
Students Scored GPA of 4.00	6	2	2	5
S2 Exam. Takers	303	166	231	Nd
PR (GPA 2.00 & above)	80.52%	85.54%	67.97%	Nd
PR to Grade 11	53.79%	64.45%	47.62%	Nd
Students Scored GPA 4.00	4	3	6	Nd
S3 Exam. Takers	395	503	502	381
PR (GPA 2.00 & above)	69.35%	77.34%	58.57%	67.45%
PR to Grade 11	31.65%	28.03%	29.88%	28.87%
Students Scored GPA 4.00	1	4	8	8
S4 Exam. Takers	274	184	256	285
PR (GPA 2.00 & above)	50.00%	82.07%	63.28%	58.60%
PR to Grade 11	28.47%	52.17%	29.69%	16.49%
Students Scored GPA 4.00	2	4	1	2
S5 Exam. Takers	935	1005	1195	749
PR (GPA 2.00 & above)	72.41%	48.55%	32.89%	83.31%
PR to Grade 11	12.19%	21.59%	18.59%	65.15%
GPA 4.00	10	16	20	20

Note. Nd = No data.

As can be seen from Table 36, in each school student achievement at Grade 10 national examination in four consecutive years was not constantly increasing. Instead, the data evidences “ups and downs” in student achievement across the five years. However, it is important to notice that such “raw test scores” provide only a measure of student performance but there are clear problems to draw inferences from these data about school performance (OECD, 2008: 12). That is to say that it is not plausible to conclude that the schools did not show continuous improvement (or add value) in student test score in the four consecutive years. It is important to notice that, there was limitation regarding data itself as well as in the rigor of the analysis. In the first place, the data were not collected through standardized instrument prepared for the purpose of measuring the “value added” by schools as the result of implementing SIP. Besides, the norm-referenced grading approach in national examination has limitation to measure gains in student achievement. More importantly, the four year achievement scores being used for the analysis were the scores of “different intake groups” of students, not “a cohort group” of students. Thus, rigorous analysis might reveal continuous gains in student academic achievement. For instance:

- If value added approach that takes into account student intake ability differences was applied, or if achievement score of same cohort of student intake was used; or
- If the analysis of gain in scores was made at various cut-points (disaggregates) between score (GPA) of 2: 00 and 4: 00; or, otherwise, if the analysis of score gain was made across different subjects in terms of the number of “A” and “B” scores. But, there no systematically organized data in schools to serve this purpose.

Arguably, “value-added approach” enables to precisely indicate the unique contributions (value-added) of schools to student performance by controlling for contextual factors that are outside the control of classrooms and schools (OECD, 2008).

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents summary of the major findings of the study, the conclusions, the recommendations to improve practice, and the implications of the finding for theory and research. First it presents the major findings of the study in line with the basic questions of the research. Second, it treats the conclusions of the study. Third, it presents recommendations to mitigate the capacity gaps and challenges facing the schools to ensure sustainable improvement. Finally, it presents the implications of the finding for theory and research.

The purpose of this study was to assess how well model secondary schools in implementing SIP in Oromia Regional State have developed capacity for sustainable improvement and do not revert back to the former inactive state. To achieve this purpose, the study assessed school capacity in terms of the following six basic research questions.

1. What is the capacity (knowledge and skill) of the schools in preparing evidence-based, specific, and measurable school improvement plan?
2. How well do the academic staff of the schools perform with a sense of professional learning community?
3. What is the leadership capacity of the schools?
4. What is the extent of the
 - a. Empowerment and engagement of students?
 - b. Engagement of parents/community?
5. What is the resource capacity of the schools (personnel, financial, physical infrastructures and materials) to ensure sustainable improvement?
6. What are the major challenges of the schools for sustainable improvement?

The study employed concurrent mixed method. Quan +Qual concurrent mixed method was believed to be the preferred type of the mixed research designs to serve the purpose of this research. A randomly selected 293 (65%) teachers, 21 (100%) of school principals (including vices); 68 (100%) department heads, and 472 (3.5 %) students were the samples for quantitative data collection. Equal proportion of sample teachers and students were taken from each of the sample schools; that is, 65% of the total teachers (excluding department heads) and 3.5% of the total students.

Finally, out of 293 questionnaires distributed to teachers, 97.61% (286) were properly completed and returned. Out of 68 questionnaires distributed to department heads, 98.53% (67) were properly completed and returned, whereas all (100%) of the questionnaires distributed to school principals and students were properly completed and returned.

On the other hand, the qualitative data were collected through interview, document analysis, observation and student FGDs. Sixteen teachers (two in each school), eight school principals/heads (the school-head in each school), eight PTA members (one in each school) and six school supervisors (one in each school based on availability) were interviewed. Similarly, taking one in each school, a total of eight FGDs with student were made. Apart from questionnaire and interview data, the strategic and yearly operational school improvement plans were analyzed for assessing the planning capacity of the schools.

5.1. Summary of Major Findings

In line with the sequence of the research questions, the summary of the major findings of the study is provided hereunder.

1. Planning Capacity of the Schools

Analysis of data collected from school administrators through questionnaire, interview, as well as document analysis reveal that model secondary schools understudy have good capacity (knowledge and skill) in preparing evidence-based, specific and measurable school

improvement plan. Nevertheless, certain gaps were evident in the planning capacity of the schools.

The combined cumulative mean score (CoM = 4.32, SD = .65) of the responses of school principals and department heads reveal that model secondary schools of Oromia Regional State have good capacity in preparing evidence-based, specific, and measurable school improvement plan. In this regard, there was no significant difference ($P > .05$) between cumulative mean score of the responses of school principals (CM = 4.40, SD = .56) and that of the department heads (CM = 4.29, SD = .73). Indeed, the analysis of the schools' strategic plan documents evidenced good capacity of schools in preparing evidence-based, specific and measurable school improvement plan. School improvement strategic plans were comprehensive and contained the key elements of good plan presented in a logical sequence. There was appreciable attempt in writing plan objectives in terms of specific and measurable outcome-based goals/targets.

Nevertheless, the analysis of plan documents evidenced some capacity gaps, especially with regard to the quality of data analysis in school self-evaluation, the conciseness of the organization and the presentation of school self-evaluation data, and the consideration of the feasibility of the objectives/targets.

Thus, it is hardly possible to conclude that school self-evaluation results were genuine and authentic. In school self-evaluation data analysis, often only the "mean rating score" of the standards and/or indicators of practices were indicated in the plan document, regardless of the information about the number of the raters and the frequency distributions. Furthermore, qualitative data to supplement the quantitative (questionnaire) data were rarely indicated in the plan document. In most cases, the objectives/targets were over ambitious to attain at the end of a three year strategic plan. Almost all of the schools over ambitiously took too many standards and indicators of practices as improvement priorities/targets regardless of their

financial capacity and the level of the commitment of the key actors (teachers, parents/community, and students).

In short, the schools have good capacity (knowledge and skill) in preparing evidence-based, specific and measurable school improvement plan. There was appreciable attempt in writing objectives in terms of specific and measurable outcomes. Nevertheless, planning capacity gap was evident with regard to the quality of the analysis of school self-evaluation data, the conciseness of the organization and the presentation of school self-evaluation data, and in the consideration of the feasibility of the objectives/targets of school improvement plan.

2. How well the Academic Staff Performs with a Sense of Professional Learning

Community

Shared vision and values, de-privatization of practice, collaboration, focus on student learning, collaborative or collective/learning through evidence-based reflection and dialogue about practice (especially with regard to instructional method, student learning and learning outcome) are the distinctive features of PLC of a staff with shared purpose and collective responsibility for student learning and learning outcome (e.g., Harris & Muijs, 2005; Hord, 1997; McLaughlin & Talbert, 2006; Mitchell & Sackney, 2009; Olivier & Huffman, 2008; Peterson & Deal, 2009).

In this regard, the finding of this study reveals the academic staff in secondary schools under the study is performing with a good sense of learning community of shared purpose. The academic staff was performing with shared vision (CM = 4.35, SD = .69), shared values (CM = 4.14; SD = .67); collaborative work culture (CM = 4.15; SD = .71), collaborative/collective learning practices (CM = 4.10, SD = .79), although the extent of learning through school-based CPD (CM = 3.68, SD = .86) and shared personal practice (CM = 3.56, SD = .75) were not as good as other PLC subscales.

The interview data reveal that the vision and values of the schools were articulated through participatory group process and subjected to discussion and comments by teachers and other stakeholders; and consensus was reached that the articulated vision and values are relevant and worth pursuing. Furthermore, the interview data revealed the existence of collaborative practices of staff at three structural levels (top, middle, and departmental), of which department level 1-in-5 teacher collaborative group/team is the most fundamental. The most frequently cited teachers' collaborative practices in the 1-in-5 work group/team at departmental level were preparing and implementing common instructional plan, evaluating the implementation of the plan, and sharing experience on the implementation of the plan, evaluating and grading each other's performance, discussion on how to overcome the weaknesses in their performance and how to narrow gaps in student learning achievement, and preparing worksheets and teaching aids to improve student academic achievement.

At the middle level, there has been experience sharing among departments and different co-curricular clubs and committees. At school level, school principals and teachers used to make discussion and reflection about the problems and practices in the implementation of school improvement plan, especially in the teaching learning domain. Generally, such collaborative work practices are more or less in line with the idea in the literature advocated by prominent authorities (e.g., Harris & Muijs 2005; Mitchell & Sackney, 2009; Peterson & Deal, 2009).

In collaborative work culture educators come together to discuss issues, sort out challenges, plan new learning opportunities, and/or discuss new instruction or curriculum ideas. Through such extensive collaboration, educators not only learn from one another, but they also enable the development of "socially distributed knowledge, whereby individual knowledge bases become part of the collective

discourse and expand and the professional capacity of the entire team (Mitchell & Sackney, 2000, cited in Mitchell & Sackney, 2009: 26).

Nevertheless, the performance of schools' staff as PLC has weakness with regard to the "learning of teachers" through school-based CPD and shared personal experience. Collaborative learning practices (group/team discussion, experience sharing, dialogue and reflection) were grounded largely on group/team's performance with regard to the implementation and achievement of planned goals and targets of school improvement rather than on "inquiry" or "action research-based" dialogue and reflection regarding the problems in student learning and learning outcome. Indeed, except for mentor-mentee induction program for novice teachers, shared personal practice (i.e., experience sharing and learning through collegial/peer classroom observation) had been rare.

Thus, from the vantage point of contention by authorities in the literature (e.g., Donalson, 2006; Gordon; 2004), it is plausible to conclude that the performance of the staff in the schools as PLC of school had weakness with regard to school-based learning of staff. It lags behind the notion that teachers in successful schools provide support to one another through observation and analysis of one another's classroom teaching (Gordon, 2004; Hord, 1997). In this study, collaborative learning of staff through shared personal experience (peer/colleague classroom observation) was not as satisfactory as other subscales of PLC.

As the literature reveals, the challenges of developing teacher collaboration and building PLC of school are many. Among others, collaborative learning model, especially learning through experience sharing and critical collegial feedback from colleague/s about classroom instruction is in conflict with the norms of collegial relations (McLaughlin & Talbert, 2006; Tolbert, 2010) that teachers are reluctant to classroom peer observation and subsequent feedback. Obviously, this is one of the reasons for weak collaborative learning through peer/colleague observation of each other's classroom instruction in schools in this study.

In short summary, the academic staff in schools understudy is performing with a good sense of learning community of shared purpose. However, collaborative work norm/practice was stronger than learning norm/practice. Learning through school-based CPD practices and shared personal experience (peer/colleague classroom observation) was not as high as collaborative norms/practices. Besides, dialogues and reflections regarding problems in student learning and learning outcome was not inquiry (or action research) based.

3. Leadership Capacity of the Schools

The leadership capacity of schools was assessed in terms of (i) the leadership practice of the school principal, (ii) shared leadership practices and, (iii) school principals' qualifications (including vices) and training to the positions. It was found that leadership capacity of schools was good in terms of leadership practice of the school principal as well as in terms of shared leadership practice. Nevertheless, leadership capacity gap was evident in the qualifications (leadership training) of vice principals to the positions. Furthermore, the data evidenced that there was the problem of attracting experienced and competent individuals to school leadership positions and turnover of the head principals.

The detailed short summary of each these three aspects of the leadership capacity of the schools is as follows.

A. Leadership practice of school principal. This study revealed that the school principals in model secondary schools of Oromia Regional State have been playing well their role of *setting direction, developing people, redesigning the organization, and managing the teaching and learning program.*

i. Setting direction. The study revealed that school principals have been working well in building a sense of shared vision (CM = 4.07, SD = .79), sense of purpose among staff, students, and parents (CM = 4.07, SD = .79), and in putting high expectation on teachers and students for the realization of shared purpose (mission) and vision (CM = 4.04, SD = .81).

The qualitative interview data confirmed that, although articulating the vision, mission, core values and goals of the schools was participatory process, the school principal was the pivotal person in clarifying the vision, mission, and core values of the school and in ensuring that the vision, mission, and core values are shared by the staff. Indeed, the school principal is pivotal person in preparing school improvement plan. It is at this juncture that the school principal gets the avenue for creating high performance expectations on the departments and teachers by influencing them to set challenging, yet achievable objectives about student learning and learning outcome (test scores). As part of implementing the school improvement plan, departments and teachers in the department would prepare action plan in line with the school's priority goals/objectives in the teaching learning domain.

ii. Developing people. The study revealed that school principals were good in understanding individuals (CM = 3.88; SD = .92) and providing support to individuals and groups (M = 4.02; SD = .81); modeling important values for the achievement of school improvement goals and targets (CM = 4.00, SD = .79) and intellectual stimulation (CM = 3.97; SD = .82).

Almost all of the interview teachers pointed out that their school principal is friendly, impartial, understand teachers' personal problems and solve conflicts peacefully. Indeed, some interview teachers acknowledged providing guidance to groups/teams and departments as one of the important practice of school principal. The provision of professional support to the technical aspect of the teaching learning program (e.g., classroom instruction, assessment, and giving support/tutorial to students) was largely bestowed to department heads and different committees led by senior teacher management/leadership group (e.g., teacher support and professional development committee, curriculum implementation and evaluation committee).

In developing teachers (intellectual stimulation), the school principals were enforcing the implementation of school-based professional development of teachers, despite lack of interest/enthusiasm on the part of senior teachers to school-based CPD practice. In fact, the management and facilitation of CPD is the shared leadership of the school principal, the CPD committee and the department heads. The commonly mentioned modeling behavior of school principals was the work commitment (devotion).

iii. Re-designing organization. This study revealed that school principals had good performance in re-structuring internal organization of the school (CM = 4.38, SD = .60), building collaborative culture (CM = 4.09, SD = .74), building climate of trust (CM = 4.03, SD = .82) and connecting school with the local community (CM = 4.01, SD = .81).

With regard to “building and facilitating collaborative culture”, the interview teachers basically mentioned two practices/behaviors of school principals: (a) establishing structures for collaboration (i.e., establishing collaborative groups/teams of teachers at departments) and (b) encouraging the collaborative work of teachers in such collaborative groups/teams. In fact, it is the external directive associated with standard-based school improvement program that prompted efforts for a greater collaboration and distribution of leadership role to senior teacher leadership group/team, department heads, and different committees. With regard to “building climate of trust”, almost all of the interview teachers warmly stated that their school principal is good at respecting and valuing/taking care for the staff. With regard to “connecting school with the local community,” almost all of the interviews stated that their school principal is working very well with PTA and able to get financial support for the school from parents and the local community.

iv. Managing the teaching learning program. The study found that school principals in model secondary schools of Oromia Regional State were adequately performing their role of managing the teaching learning program (CM = 3.97, SD = .77). They take proactive

measures before things get wrong ($M = 4.13$; $SD = .84$), give adequate attention to improving the teaching-learning program (4.02 , $SD = .90$), monitor teachers' performance toward achieving goals and targets ($M = 3.87$, $SD = 1.01$), regularly supervise the classroom teaching-learning process ($M = 3.88$, $SD = 1.01$) and allocate resources in a way that promote effective teaching learning process ($M = 3.92$, $SD = 1.02$). In the qualitative interview, almost all of the interviews asserted that their school principals give due attention to the teaching learning process. None of the interviews complain that their school principals give less attention to the teaching learning process and to its facilitation.

In fact, as the qualitative data confirm, school principals perform the monitoring of the teaching learning process indirectly through the shared leadership of teachers and students to a large extent. Congruently, the literature (e.g., Hallinger & Heck, 2009; Silins & Mulford, 2007) on this category of school principal leadership practice evidences that the school principal provide instructional guidance either through some formal supervision procedure, or more importantly, in informal ways of joint efforts with teachers.

B. The practice of shared leadership. Nowadays, there has been strong advocacy for distributed leadership, especially that of teacher leadership for building leadership capacity, for building collaborative culture, shared responsibility and accountability of teachers for sustainable school improvement. In this regard, this study found that that the practice of shared leadership was good (Teachers: $CM = 3.99$; $SD = .73$; School administrators: $CM = 4.08$; $SD = .65$). There was no statistically significant difference between the responses of teachers and school administrators (school principals and department heads).

However, there were relatively large variability of responses in the respondents' responses that students had strong sense of shared responsibility in the leadership of the school (Teachers: $M = 3.90$, $SD = .97$; School administrators: $M = 3.69$, $SD = 1.00$) and

student representatives were actively involved in managing student behavior (Teachers: $M = 3.85$, $SD = 1.04$; School administrators: $M = 3.80$, $SD = 1.02$).

From the analysis of interview data, it was found that, apart from the traditional formal positions such as department heads and unit leaders, structures such as senior teacher leadership group/team for the management of teaching learning program and the various committee led by members of the senior teacher leadership group/team constitute the different areas of teacher leadership practices in the schools.

C. School Principals' Qualifications and Training to the Positions: The majority of the school principals/school-heads (5 out of 8) were Master's degree in educational leadership/school leadership. However, vice principals lack such level of training to the position. Moreover, several interview teachers pointed out the problem of attracting experienced and competent individuals to school leadership position in general and that of the deputy principal positions in particular. Furthermore, some interview teachers doubt the selection and appointment of school principal was solely merit-based. Another gap in building the leadership capacity of school was the turnover of school principals in the form of promotions to positions at the Local Education Office or other public institutions.

In short summary, the schools understudy had good leadership capacity. The school leadership was widely shared in all of the four dimensions of school leadership practices. The process of *direction setting* (defining vision, mission, and values) was participatory group process led by school principal. In *developing people dimension*, teachers asserted that the principals were good at understanding individuals and providing support to individuals, modeling important values of school improvement, intellectual stimulation through enforcing, facilitating/supporting CPD of teachers. However, professional support to the technical aspect of the teaching learning program, as well as the management and facilitation of CPD was the shared leadership of senior teachers and the departments. In the *dimension of*

re-designing the organization, the school principals were good at building climate of trust and collaboration, and in working with PTA. There was appreciable practice of shared leadership by teachers and students. To a large extent, school principals lead the *teaching learning program* through shared leadership of teachers.

4. The Empowerment and Engagement of Students and Parents/Community

I. The empowerment and engagement of students

A. Student empowerment. As per the quantitative data, the overall empowerment of students in taking responsibility for *self-control of misbehavior and their own learning* was good (CM = 4.03, SD = .73). But, from the interview data with teachers and FGDs with students, limitation in taking responsibility for self control their learning was evident. Indeed, students' view of their involvement in *decision making* of the schools relevant to them and their empowerment in *presenting their problems* to school administration was good (CM = 3.91; SD = .78). There was no statistically significant difference between male and female students in their perception of the empowerment of students (Males: M = 4.01, SD = .70; Females: M = 3.97, SD = .62; $t(470) = .496$; $P = .487$; $P = .487$). This suggests the presence of gender equity in the practices of student empowerment in the schools under the study. However, there was a relatively large variability ($SD > 1.00$) in student views with respect to the mean scores of individual items for assessing student empowerment.

The qualitative data revealed the existence of three tried structures/organizations to enable students to take responsibility for self-control of misbehaviors and their learning. These were *classroom level, shift level, and classroom level structures*. The interviews (school principals, teachers and students) asserted that the empowerment of students through these structural levels provided students the opportunity to discuss and reflect on the ongoing practices in their learning and disciplinary behavior in terms of the rights and obligations of students, and the rules and regulations of the school. The interviews believed that student

empowerment through these structural levels was raised the awareness of students about their rights and obligations; and it improved student disciplinary behaviors in respecting teachers, and the rules and regulations of school.

B. Student engagement. The engagement of students in terms of each of the three dimensions of student engagement (behavioral engagement, academic engagement and affective engagement) was good. There was no significant difference between male and female students in terms of their perception of behavioral engagement (Males: $M = 3.89$; $SD = .77$; Females: $M = 3.84$, $SD = .75$; & $t(459) = .730$; $P = .466$); academic engagement (Males: $M = 3.98$, $SD = .68$; Females: 3.93 , $SD = .71$; & $t(459) = .780$; $P = .436$), and affective/identification engagement (Males: $M = 3.85$, $SD = .99$; Females: 3.93 , $SD = .96$ & $t(459) = -.895$; $P = .371$). This suggests gender equity in school live experience and satisfaction of male and female students across the three dimensions of student engagement in this study. Corresponding to each of these three components of student engagement, the short summary of the finding is as follows.

i. Behavioral engagement (Participation and positive relationships). On the average, the quantitative data collected from students reveal the adequate behavioral engagement of students ($CM = 3.86$; $SD = .76$). The school encourage students to participate in co-curricular activities/clubs ($M = 3.99$, $SD = 1.14$); and students actively participate in extra-curricular activities ($M = 3.73$, $SD = 1.21$). However, students had less conviction that the extra-curricular clubs in their schools were well functioning ($M = 3.69$, $SD = 1.22$). Furthermore, the data revealed the existence of positive relationships among students, and between students and the teachers. Furthermore, it was consistently reported in student FGDs that students respect diversity and there was no problem of female student harassment by male students.

ii. Academic engagement. The academic engagement of students was assessed in terms of two subcomponents. With regard to the first subcomponent (i.e., teacher related factors affecting the academic engagement of student), the data reveal the adequate presence all of the three teacher related factors included in this subcomponent: (i) teachers' effort in promoting the active learning of students (CM = 3.96, SD = .80); (ii) subject area knowledge (CM = 3.82, SD = .99); and (iii) expectation on students to work hard and providing support to them (CM = 3.85, SD =.87). There was no statistically significant difference between male and female students in terms of their perception of the adequacy of these teacher related factors that affect the academic engagement of students (Males: M = 3.88, SD = .75; Females: M = 3.89, SD = .78; & $t(459) = -.064$; P = .949). However, there was relatively large variability (SD > 1.00) in student views with respect to the mean scores of individual items in this subcomponent.

Regarding the second subcomponent (i.e., student active involvement in learning), students' self-report data suggest that students in model secondary schools had active involvement in learning, including in classroom instructional learning as well as in 1-in-5 collaborative learning group (CM = 4.10; SD = .76). In this regard, there was small statistically significant difference between male and female students self-report of their active involvement in learning (Males: M = 4.19, SD = .74; Females: M = 4.02, SD = .75; & $t(459) = 2.466$; P = .014). As in the case of the first subcomponent, there was relatively large variability (SD > 1.00) in student views with respect to the mean scores of individual items in the subcomponent.

Nevertheless, the qualitative data did not support the quantitative self-report data of students. Many interview teachers (T9, T12, T13, and T16) as well as students (FGD2, FGD3, FGD4, FGD5, FGD6) contend that 1-in-5 collaborative learning group is promoting

dependency in student learning, as most of the low and average learning ability students depend on the top ones in doing group assignments/projects.

iii. Affective/Identification engagement. The affective feeling/identification of students with their school was good (CM = 3.88, SD = .99). Students had good appreciation for the effort of the teachers to enable students understand the subject matter they teach (M = 3.88, SD = .98). In addition, they had good appreciation for the effort of their school to improve student learning and academic achievement (M = 3.92, SD = 1.23). Moreover, students had good appreciation for the orderly (disciplinary) climate in their school (M = 3.83, SD = 1.22).

II. The Engagement of Parents/Community

The data show that PTAs in model secondary schools perform their duties with good commitment. In almost all of the schools, the school principals acknowledged the strength and the commitment of PTA as one of the major factors for their success in school improvement. Above all, the school principals as well as the interview PTAs stressed the contribution of PTA in securing financial support to school from the parent and/or the community. The local community/parents are willing in supporting the school to the extent of their capability in cash, in kind, or in labor (School principals; M = 4.10; Department heads: M = 3.84). However, the parents' follow up of their child's learning was not satisfactory (School principals = M = 3.81; Department heads: M = 3.37).

5. The Resources Capacity of the Schools

i. Human resources capacity. The data reveal that teachers in model secondary schools were qualified to teach at secondary as per standard of the country, except for ICT education teachers. Overall, the data revealed that teachers had good professional competence, except novice teachers. Several interview teachers mentioned that novice teachers lack competence in subject area knowledge and had problem of professional identification. However, in

contrary to the quantitative data, the qualitative data revealed lack of commitment/devotion among the majority of teachers.

ii. Financial resource capacity. The quantitative data collected from school principals and department heads reveal that the schools had good internal income capacity (CoM = 3.63). However, they neither agreed nor disagreed that the government provide the schools with adequate block grant/financial budget (CoM = 3.46) and that parents/local community had good economic capacity to support the school in cash (CoM = 3.31). In all cases there was no statistically significant difference in the mean scores of school principals and department heads. Nevertheless, the interview data from school principals and supervisors made it clear that there was financial constraint problem in the schools. In all of the schools, the interviews (school principals and supervisors) mentioned financial constraint as one of the major challenges for sustainable school improvement.

iii. Physical Resources Capacity. In rural district town schools (school-1, School 2, School 3, and School 4), there was no satisfactory library, no up-to-standard laboratory rooms although the availability of chemicals and apparatuses were often reported adequate. Due to lack of laboratory technicians, the laboratories were not well functioning and, therefore, was severely limited laboratory supported learning in the schools. Although all of the schools had tap water, only two or three taps were functioning. Indeed, although all the schools had separate toilet for boys and girls, the quality as well as the sanitation were often poor and there was no water supply for washing hand after using latrine. Furthermore, shortage of computer and lack of maintenance of the existing computers in some schools (e.g., School 1, School 2, School 4, and School 5) was reported in student FGDs.

6. Major Challenges/Problems for Sustainable School Improvement

The study found several challenges that hamper the suitability of improvement in model secondary schools of the region. The major ones were presented into six major themes here under.

A. Problems related to school-based learning of teachers. Learning of teachers and school principals is at the heart of school capacity and capacity building for sustainable improvement. To this end, although school-based CPD of teachers was carried out in the schools its accomplishment and effectiveness was hampered by several problems/challenges. These include:

i. Lack interest/enthusiasm on the part of senior teachers. School principals, school supervisors and almost all interview teachers persistently expressed senior teachers in general and especially those senior teachers who completed career development ladder and near to pension retirement tend to avoid school-based CPD for they feel that it has nothing to do to their career development, or accrues them any personal benefit. To this end, the analysis of quantitative data by disaggregating into Career Stages of teachers (i.e., seniority of teachers) supports the qualitative data (P-value for one-way ANOVA = .001, & $\eta^2 = .051$).

Post-hoc test using Tukey's Honestly Significant Different test (HSD) confirmed that teachers at Higher Level Career Stage and Middle Level Career Stage have less favorable attitude for school level CPD practice as compared to teachers at Lower Level Career Stage. Stated in other words, teachers at Lower Level Career Stage have more favorable attitude for school level CPD practice than do senior teachers at Middle Level Career Stage (P = .042) and at Higher Level Career Stage (P < .0001).

ii. Lack of understanding and know-how of the current school-based CPD. The qualitative data reveal that teachers lack adequate knowledge and understanding about the current school-based CPD practices. There was no consensus about the purpose and the

practices that constitute the current school-based CPD. Indeed, teachers' lack of the know-how of planning, evaluating and reflecting on the impact of CPD practices or actions was pointed out by several interviews.

iii. Inconsistent focus from the Local Education Administration. Teachers complain that the attention given to school-based CPD by government is inconsistent; and the current school-based CPD practice was solely left to school with little support and guidance from the local education administration.

iv. Indulgence and superficial performance. Lack of serious follow up of teachers' actual performance vi-sa-vis the actual CPD planed by the teacher. Often, low attention is given to the actual performance and the quality of the performance.

v. Misplacing the purpose of Action Research undertaking. Although many senior teachers carryout action research as part of school-based CPD practice, the focus was on doing the action research per se as an exercise and/or to fulfill requirement for career development rather than on the application (implementation, evaluation and reflection of the impact of the action) in solving practical problems.

B. Lack of commitment/devotion on the part of the majority of teachers. As an aspect of the teacher professionalism, the notion of professional learning community comprises a commitment to moral purpose, continuous learning and knowledge of teaching, educational context sensitiveness, collegiality, and commitment to change process to make a difference to school and students (O'Donoghue & Clarke, 2001: 90). Hord (1997) emphasizes that at the heart of effective PLC of a school is an absolute commitment to improving the learning of each student through collaborative teams of teachers whose members work to improve learner outcomes.

To this end, in almost all schools under the study, the interview participants (teachers, school principals and school supervisors) pointed out that the majority of teachers lack

commitment/devotion to work hard for sustainable school improvement. They contended that the source of low commitment/devotion is the low attention and respect that the government and the society give for teachers and teaching profession. In addition, teachers stressed the low learning motivation of students as a factor adversely affecting teachers' motivation to work hard.

C. *Low learning motivation of students.* Teachers, school principals and students contended that the majority of students have low learning motivation as their aspiration is just to complete secondary education as opposed to proceeding to preparatory and higher education. Students' lack of learning motive is evident in their low interest of attending tutorial classes and in the 1-in-5 collaborative peer-learning group. Many interview teachers and students asserted that 1-in-5 collaborative peer learning group is promoting dependency in student learning for most of the low and average learning ability students depend on the top ones in doing group assignments/projects.

D. *Availability and adequacy of physical facilities and materials.* In rural District Town schools (School 1, School 2, School 3, and School 4), there was no satisfactory library, or no laboratory (e.g., School 2), or no up-to-standard laboratory although the availability of chemicals and apparatuses were often reported adequate. Due to lack of laboratory technicians, the laboratories were not well functioning and, therefore, there was no well laboratory supported learning in the schools. Besides, students complain for shortage of computers and lack of maintenance to nonfunctioning computers.

E. *Financial constraint.* Almost all the school principals, supervisors as well as many of the interview teachers mentioned financial constraint as one of the major challenges for sustainable school improvement. The government budget (block grant) allotted to schools by the local Education Administration Authority had been insignificant and the appropriation per student is different across different districts/municipalities.

F. Gap in building sustainable leadership capacity. Although the majority of the school principals were Master's degree graduate in education/school leadership, the deputy principals lack such level of training. Moreover, some participants pointed out the problem of attracting experienced and competent individuals to school leadership positions. To this effect, one explicit embedding factor is that the pay-off of the position is not enticing to able and experienced teachers, such as those in higher career ladder (e.g., higher teacher, lead teacher, higher lead teacher). Furthermore, interview teachers doubt the selection and appointment of school principals is solely merit-based.

5.2. Conclusions

It is plausible to conclude that model secondary schools in implementing SIP in Oromia Regional State have good capacity to sustain school improvement they embarked on. However, it requires that the capacity gaps and challenges identified in this study should be resolved, or ameliorated.

Briefly distilled, the schools have good capacity (knowledge and skill) in preparing evidence-based, specific and measurable school improvement plan, despite certain gaps. Secondly, the academic staff is performing with a good sense of professional learning community. Thirdly, the leadership capacity of schools is found to be good. It was widely shared in all of the four dimensions of school leadership practices, and the practice of shared leadership was good. Fourthly, the empowerment of students in taking responsibility for self-control of misbehavior is one of the important achievements of the schools, although there was weakness in student self-control of their learning. Fifthly, in all schools, the school principals acknowledged the commitment of PTA as one of the major factors for their success in school improvement, especially with regard to controlling student misbehavior and securing financial support from the local community.

Nevertheless, it is very unlikely that the schools would sustain the improvement they embarked on unless challenges for sustainable school improvement identified in this study are mitigated. Serious attention should be given to alleviate, or ameliorate the adverse effects of these challenges facing the schools. To this effect, attention given to model secondary schools should not be overlooked by attention to the expansion of secondary schools to increase access. Due to lack of attention and support, the reverting (failing) back of these schools would have serious adverse impact on the success of school improvement program in the region. On the other hand, the success of these schools in ensuring sustainable improvement would provide the momentum for the success of school improvement program in the region.

It is, therefore, important to give attention by each party (that has a stake in school improvement) to the capacity gaps and the challenges that the schools were currently faced. First, it is necessary to mitigate the gap in the planning capacity of the schools with regard to the quality of school self-evaluation data analysis, the conciseness of the organization and the presentation of the self-evaluation data, as well as the consideration of the feasibility of the objectives/targets of school improvement plan. These planning capacity gaps seem to have resulted from using many indicators and standards for school self-evaluation and the manual data analysis that the schools use. It is undeniable fact that the schools are expected to conduct self-evaluation on about fifteen standards, each consisting of many indicators of practice. Apparently, inclusion of many improvement standards and indicators of practice had impeded the conciseness of the presentation and the quality of analysis of self-evaluation data, the setting of feasible priority targets and the action plan that is in line with the capacity of the school. Besides, the absence of continuous short term training to school principals, school improvement committee and department heads seem to have greatly contributed to the observed gap in school improvement planning capacity.

Second, although the schools' staff were organized and had been performing collaboratively with a good sense of professional learning community, diligent engagement and internalization of collaborative work, and collegial learning practices through reflective dialogue, school-based CPD, and sharing personal practices were not yet strong. It is under the enforcement and close monitoring by the management and leadership of the schools. The institutionalization of the collaborative and learning practices among staff requires transformational change in the beliefs and values of the key actors (especially teachers). To this effect, persistent and deliberate actions of strong leadership, especially the shared leadership of teachers has paramount importance. In addition, persistent attention and support by local education authority is equally of paramount importance.

Thus, both at school and Woreda/District education level, capable and committed leadership should be in place to persistently deliberate on nourishing and institutionalizing collaborative work culture, mutual support and collegial learning of teachers for the learning of students. Such leadership of school should be capable of “constructively influencing” teachers towards realizing their professional responsibility of enabling the learners to learn and to be successful in academic achievement. This is to say that leaders who understand their leadership roles are to be increasingly supportive, fostering shared leadership as well as positive relationships and climate of trust in a school. At the same time, such leadership should be those who make diligent effort in enabling students develop confidence, motivation and taking responsibility for improving their learning.

Third, as pointed out earlier, the current leadership capacity of the schools (in terms of shared leadership as well as the leadership practices of schools principal in executing the role of setting direction, developing people, implementing structures for shared leadership and collaboration of teachers) was good. Nevertheless, there was apparent leadership capacity gap at deputy principal position, both in terms of training and staffing by strong and competent

individuals potentially capable for succession to head-ship. In all schools, deputy principal positions were rarely staffed by strong and competent individuals because school principal position has not been attractive to able and experienced teachers. Therefore, it is important to give attention to building the leadership capacity of the schools so as to ensure sustainable improvement.

Fourth, attention to the motivation and commitment of teachers has paramount importance so as to build the academic staff of strong culture of *collaboration* and *learning* for the purpose of improving student learning and learning outcome (or sustainable school improvement). To this end, this study found that the majority of teachers in the schools lack commitment/devotion for ensuring sustainable school improvement (i.e., improving student learning and learning outcome). On the part of the Government and decision makers, it should be noted that structural reform in its own cannot bring authentic collaboration and learning of teachers for improving student learning and learning outcome unless teachers are readily committed and take professional responsibility for student learning and learning outcome. Obviously, school-based CPD and departmental level organization of teachers into 1-in-5 collaborative group/team was prompted by top-down reform program; and the effectiveness of such structural reform, therefore, depends on the extent of the commitment of teachers to improve student learning and learning outcome.

Fifth, although student perception data on the different forms of student empowerment and engagement were good, there were obvious problems that should be solved to realize sustainable improvement in student learning and learning outcome. These problems include students' lack of active involvement in classroom teaching learning process, dependency in co-operative/collaborative learning group; and lack of learning motivation among majority students due to various reasons discussed in the data analysis section.

Sixth, the problem of non-salary block grant appropriation to schools by the local government authority was a remarkable hindrance to sustainable school improvement. With the implementation of school improvement program, although the availability of school grant and financial contribution of parents and the community were greatly contributed to the financial capacity of schools, the non-salary block grant allocated to schools from the Local Government Authority (Woreda/District or Town Administration) was reported insignificant in almost all schools; and was declining in view of the current purchasing power of money. Surprisingly, the more the schools were able to get financial support from community participation and/or internal income, the lesser is the financial support from the local education authority, which offsets the effort of the other party - the school and the community.

Seventh, the “absence” or “inadequacy” of physical facilities and services in most of the schools is the most critical problem to be resolved in order to ensure sustainable school improvement. It is important to give attention to improving the adequacy and quality of physical facilities and services in the schools, especially in those schools in rural woreda/district towns. In the absence of basic physical facilities and services, sustainable improvement in student learning and learning outcome is hardly possible. Obviously these schools were regarded as models because of their effort in improving the learning of students and fulfilling the facilities they lack, especially through community participation. This effort of the schools and community should be augmented, not offset by less attention to the schools.

5.3. Recommendations

One of the important features of large-scale, systematic school improvement is the notion of multi-level perspective (Harris, 2002; Hopkins, 2001; Reddy, 2007). That is, although school is the center of change, it cannot act alone. All the actors in the educational

system (teachers, parents, staff, and local and state authorities) need to work collaboratively for the achievement of the highest quality of school improvement. Commitment at the central level is crucial for sustained effort and the maintenance of support structures required at district and school level.

Commitment at the school level results from empowered successful action, personal mastery that starts with good assistance and develops from practice. In effect, local empowerment builds emotional as well as administrative and problem-solving capacity (Hopkins, 2001: p. 9).

Thus, to enable model secondary schools of the region to sustain school improvement they embarked on, attention should be given to the capacity gaps and challenges explained above. Ameliorating these gaps and challenges requires the concerted effort and commitment of the *school community* (staff, PTA, parents, and students), *the local and regional education authorities, the Regional State* as well as the *Federal Government (Ministry of Education)*.

A. Recommendations to Oromia Regional Education and the Regional State

Build leadership capacity. In order to sustain and strengthen school staffs to function as collaborative professional learning community, supportive leadership capable of transforming the traditional culture of school into collaborative and learning community of staff is a necessary ingredient. To this effect, Oromia Regional State and the Education Bureau should give attention to alleviate the existing leadership capacity gaps in order that the schools are able to sustain improvement. In this study, most of the deputy principals were found to be first degree graduate subject-teachers with no training in leadership. Furthermore, as interviewees pointed out, there were embedding factors to experienced and competent individuals to be attracted to school leadership position in general and that of the deputy principal positions in particular. One embedding factor mentioned by the participants was that the pay-off of the position was not enticing to able and experienced teachers, such as

those in higher career ladder (e.g., higher teacher, lead teacher, higher lead teacher). The other was the feeling of insecurity (demotion or firing) that would likely arise from intervention and unfair judgment of higher officials (T15, T15). Furthermore, interview teachers (T12, T15, T16) doubt the selection and appointment of school principal was solely merit-based.

Thus, Oromia Regional State and the Education Bureau should give attention to building the leadership capacity of the schools by attracting and selecting competent individuals to the position. To this effect, it is necessary to ensure merit-based recruitment. This is not, however, to mean that there were no defined requirement criteria and procedures (such as vacancy announcement, screening and selection procedure), but it is to remark that “avoid the subtle bias by local education authorities”. Moreover, as most of the deputy principals lack leadership training necessary to assume the position, it is important to give attention to train the deputy principals for the current position as well as to build sustainable leadership capacity pool to succession to the head-ship (school principal) position. To this effect, the region should recognize that building leadership capacity for sustainable school improvement requires proactive action not only to staff the current position, but also for the succession to the head-ship (school head) position in case the current head leave the position.

Mitigate the turnover of strong school principals. Evidently, school principals sometimes promote/transfer to positions at the Local Education Office or other public institutions, or at worst, they leave the job on their own for jobs in other organizations, often public institutions. The turnover of school principal has obvious negative effect on the sustainability of the developing collaborative and learning practices in a school, especially when there is no leadership succession capacity from within. Importing from outside (if any) may result in double jeopardy if he/she fail adapt to the new school context and sustain improvement, especially in large size schools. Oromia Regional State should, therefore, give

attention to retaining strong school principals. Obviously, the faire way of retaining them is to make the school principal position pay-off and available only to capable and interested individuals to make a difference, but not as a steppingstone to maneuver to positions in other organizations/public institutions. This, in turn, requires in the first place the need for careful recruitment of individuals who are competent and have interest to make difference; and secondly, it is necessary to have local education authority that understands its shared responsibility of supporting and developing the school leadership, as opposed to intervening, blaming, biased outlook, or coercive actions.

Give attention to ensure effective school-based CPD. As pointed out earlier, teachers' unfavorable attitude for school-based CPD and/or superficial compliance has several origins. First, there is lack of understanding about the current school-based CPD and/or skill gap in CPD planning, impact assessment, and reflection. There was no consensus among interviewees about the purpose and the practices that constitute the current school-based CPD. Second, teachers' complain for lack of consistent attention and expertise support to school from woreda/district education. Teachers complain that the attention given to school-based CPD is inconsistent; and the current practice of school-based CPD practice was solely left to school with little support and guidance from the local education administration office.

Formerly in the past years, there was good attention to school-based CPD: there were workshops and awareness creation; there were booklets to guide CPD and we were used to discuss on these booklets. Nowadays, however, the attention given to CPD from the Local Education Administration bureau become low; the bureau is silent regarding school-based CPD of teachers (T15).

Thus, the problem of teachers' lack of understanding and know-how of the current school-based CPD should be resolved. The implementation and institutionalization of school-based CPD requires creating adequate understanding and ensuring consensus on school-based

CPD from the view point of the legal and the professional obligations on the part of teachers. To this effect, support by well informed experts from education authorities or other institution such as universities has paramount importance. Besides, ensuring supportive conditions for school-based CPD (e.g. resources, expertise support) and the associated professional benefits and incentives for teachers is required on the part of the government.

Alleviate the problems of inadequate facilities and services. The problem of inadequate facilities and services (such as science lab rooms, library, and computers for ICT education) as well as the shortage of lab technician, qualified and competent ICT education teachers should be resolved. Otherwise, it dampens student learning and the aspiration of sustainable improvement in student learning outcome. Attention given to model schools should not be overlooked by attention to the expansion of secondary schools to increase access.

Alleviate the problem in non-salary block grant allocation to schools. Financial resource capacity of school is the most determinant factor to solve the problem of the inadequacy of physical facilities and services that are necessary to facilitate and support the teaching learning program. With the implementation of school improvement program, the school grant and increased financial contribution of parents and the community have greatly contributed to the financial capacity of schools. However, the block grant allotted to schools from the Local Government Authority (Woreda/District, and Town Administration) was reported insignificant in almost all schools and is declining in view of the current purchasing power of money; and the appropriation per student is different across different Districts/Municipalities. The more the school secured financial income from the local community and internal income source, the lesser the financial support from the local education authority.

Therefore, the region should ensure that schools' financial capacity augmented by school grant and community participation should not be off-set by reduced financial budget

to schools by Local Authorities. It is important to spent money secured from parent and community only for developmental purposes such as fulfilling physical facilities and services as opposed to spending on running costs such as stationary. To this effect the government non-salary block grant to schools should able to cover at least the day-to-day non-salary running costs of teaching learning process.

Fill the gap in the planning capacity of schools. To ameliorate the gap in planning capacity, it is necessary to provide continuous short term training on school planning to school principals, to school improvement committee and department heads on the basis of continuous follow up of the planning capacity gaps of the schools and need assessment. To this effect, the regional and the local education Authorities of Oromia Regional State should assist schools through provision of short term trainings on the basis of continuous follow up of the planning capacity gaps of schools and need assessment.

B. Recommendations to Woreda/District Education Authorities

Provide support to school-based CPD. As already explained, school-based CPD practice in the schools is weak due one, or the combinations of several reasons. This includes teachers' lack of understanding of the "what" and the "how" of school-based CPD, teachers want to avoid school-based CPD for it puts additional workload, and/or teachers feel that it doesn't help them gain professional knowledge and skill apart from making them busy and consume their time. At worth, some teachers associate it with a strategy to exploit teachers, or make teachers busy.

Thus, to realize effective school-based CPD, it should be supported through the involvement of school supervisors and others in collaborative practices with teachers, as opposed to simply telling CPD policy and managing compliance. This collaborative work should be in a jointly identified problems and areas of improvement in the teaching learning program.

Focus on quality of student learning, besides attention to zero dropouts. Pressure from local education authorities on schools to ensure “no student drop out” has been evident. Though this is a good thing, it should not be at the expense of education quality. Ensuring the quality of student learning in mastering the required knowledge, skill and behavioral changes should be given due attention. Too much tolerance to student absenteeism simply to reduce dropout has negative effect which is costly than the dropout by itself. Retention (reduced dropout of students) at the expense of the actual learning and the required learning outcomes of the student is of no avail to the student as well as to the parent and the society at large; and its negative consequence costs more than the dropout per se.

Improve non-salary financial allocation to schools. Woreda/District, and Administrative Town education authorities and Oromia Regional State should commit itself to adequately support schools financially in “non-salary block grant budget” and, as much as possible, to provision of “development fund” or “top up incentive budget” for best performing model schools. Caution should be made that schools’ financial capacity augmented by school grant and community participation should not be off-set by reduced financial budget to schools by Local Authorities. It important to have up-to-date non-salary financial budget appropriation formula that considers the current and the future inflation rate for the appropriation of block grant (government budget) to schools by local education authorities, especially the Districts/Municipalities.

Provide lateral linkage and support structure to school-community relations. Ensuring school-community relation and community support to school is too difficult for rural district secondary schools serving students coming from wide catchment area covering all or many rural kebeles/villages. Without strong lateral linkage and support from woreda/district education authorities, it is difficult for the schools to ensure strong public-school relationship. Woreda/District Education Board should recognize the gap and committed itself to ensuring

school-community relations in rural district towns. To this end, the complaint on the part of PTA and school principals is that the members of the Board are often busy with their own official duties and, thus, lack attention to school. Current research evidence (e.g., Leithwood et al., 2010 study in Australian schools) using a survey data from a large sample of school principals and teachers on the role of distributed school leadership reveal that “fostering democratic participation of the community in school leadership” appears to be the function “District Education Authorities” as well as that of the “School Leadership”. The study result suggests that districts and schools serving low socio-economic communities have to work hard to develop an ethos supporting parent involvement. For Ethiopia in general and Oromia Regional State in particular, this entails that rural-district secondary schools serving students coming from wide catchment area (many rural kebeles/villages) require lateral linkage structure other than Woreda and/or Kebele Education Board to ensure strong and profound school-public relations.

C. Recommendations to Schools

Sustain and strengthen the sense of staff performance as PLC. Building capacity for sustainable school improvement requires paying careful attention to developing and fostering collaborative processes, and collaborative/collective learning of staff (Harris & Lambert, 2003). As pointed out earlier, as the result of structural arrangements for interdependence and collaboration prompted by school improvement program, good collaborative performance of staff was evident in schools understudy. The staff works collegially for the purpose of securing certain outcomes linked to improving teaching and learning. The collaborative practices are evident within and among three structural levels top management level, middle level and departmental level groups/teams of teachers were evident. Collaborative and collective learning through sharing personal experience was also evident at group/team level at departments and, to some extent, among departments.

However, the sustainability and effectiveness of collaboration and learning of staff at these various levels depends on the extent to which the collegial discussions (interactions) among the collaborators involve commitment, trust, critical dialogue, reflection and enquiry that focuses on improving student learning and learning outcome; school staff is nourished and sustained as a learning professional community when individuals openly and collegially reflect on, assess professional practices (Harris & Lambert, 2003). However, schools understudy has limitations with regard to these elements.

Apart from interpersonal relations, the collegiality of the staff should be concerned more with norms and values that define the faculty as a community of like-minded people to a common commitment. Thus, the school leadership (school principal, department heads and group leaders) should foster among the staff the commitment, mutual understanding and trust, critical dialogue, peer observation of classroom, and enquiry/action research. Teacher collaboration, reflection, enquiry and partnerships are important ways of building capacity for sustainable school improvement. As literature and empirical evidences reveal, this is something that teachers can and should actively create themselves. Teachers' learning based on collaboration, reflection and enquiry promotes shared purpose, and develops teachers' sense of efficacy and agency (Harris & Muijs, 2005). The schools are therefore recommended to encourage and focus on innovative practices, student learning focused enquiry, the collective learning of the staff, and the school at large.

Deepen shared leadership of teachers. Nowadays, there is a growing recognition that attempts to bring about school improvement would have limited impact in raising student performance and achievement unless multi-level approach that encompasses school, department and classroom level is adopted (Harris, 2002; Harris & Lambert, 2003; Hopkins, 2001). In schools that have built leadership capacity, a climate of collaboration exists and there is a collective commitment to work together (Harris & Lambert, 2002; Harris & Muijs,

2005); and this commitment and collaboration is the result of discussion, development and dialogue among those working within the organization (Harris & Lambert, 2003).

Thus, to sustain and promote collaboration and learning of staff to improve student learning and learning outcome, the school principals should deepen the advantage of collaboration and shared leadership, especially at department level for departmental level collaboration and shared leadership has strong direct effect on student learning and learning outcome. To this effect, first ensure that departmental level self-evaluation, problem identification, action plan, implementation and impact assessment on student learning and learning outcome should transcend compliance and evolved to a level of authentic professional dialogue, reflection and action at all departments. Second, ensure a sense of school-wide thinking and responsibility among individuals and groups a move away from concern about students in my/our classroom in our subject area to students in our classroom and in our subjects, and to students in our school. Third, ensure the commitment of able and influential senior teachers as collaborators and change agents. Fourth, use praise and incentive to a model performing individuals and departments for reinforcing positive norms and values for sustainable school improvement.

Deepen shared leadership of students. The current effort of the schools in empowering students to take self control of misbehaviors and to take responsibility for their own learning is good. Yet, it requires well coordinated concerted efforts of teachers and the school leadership to enable students to develop confidence, motivation for taking and discharging their responsibility for self-control of their own learning. The current student involvement in school decision making and their shared leadership in controlling student discipline for effective teaching learning process needs to be maintained and further strengthened.

Focus on student learning and learning outcome. Generating school improvement that impacts directly on student learning and achievement is possible only by focusing attention

upon improving teaching and learning. In a focused professional community of staff, there is a strong and clear commitment to student achievement which evidenced by rigorous academic work, teachers' personal concern for student success and the expectations on students to work hard (Segiovanni, 2001). Effective teachers and effective schools take seriously the link between classroom practice and student learning outcomes (Harris, 2002). Where school improvement works most effectively, it involves teachers aiming for a clearly defined set of student learning outcomes or targets. Within successful school improvement, the learning level is the main focus for development and change. At best, teachers use student achievement data from a wide variety of assessments to continually evaluate and adjust instruction.

Ameliorate problems related to student empowerment and engagement. Measures should be taken to ameliorate problems related to student empowerment and engagement that are embedding to improving student learning and learning outcome. To this effect, the school and teachers should:

i. Avert dependency in student co-operative/collaborative learning group. Teachers' collective focus on; and a sense of collective responsibility for student learning is central to mature professional learning community of school and they believe that students display self-direction, problem-solving capabilities, social competence, and participation in the world around when guided and supported by teachers and the school (Lambert, 2003).

ii. Overcome lack of active involvement of students in classroom learning. The problem of lack of active involvement of students in classroom teaching learning process needs a serious attention for the realization of sustainable improvement in student academic achievement. Research indicates student empowerment and the different forms of student engagement (behavioral, academic and affective identification with the school) are strong predictors of student learning outcome and retention (e.g., Leithwood, 1999a, 2000; Willims,

2003). Improving schools enhance the quality of learning by involving students centrally in the learning process and ensuring that they feel empowered to learn. To this effect, teaching strategies reflect not just the teacher's classroom management skills, but also the ability of the teacher to help students expand their learning capability (Harris, 2002). Teachers build learning capacity within their classrooms (a) when students work together as part of a team sharing experiences, being given different roles and developing their own self-esteem and confidence; (b) when students are helped "learn how to learn", and actively involved in a review and reflection of the learning process, which is effected when students use formative and motivational forms of assessment that reinforce learning (Harris 2002; O'Donoghue & Clarke, 2010).

D. Implications for Ministry of Education

Have a firm recognition that teachers and their commitment matter. Among other resources, school improvement literature emphasizes the pivotal role of human resources, especially academic staff of the required level of qualification, motivation and commitment as the key enabling factor for sustainable school improvement.

Day et al. (2007) remark that what marks teachers stand out as "good" or "better than good" is not only their content knowledge and pedagogical skills, but it is their commitment to their teaching and to their students' learning and achievement.

They [teachers] matter to the education and achievement of their students; and no educational reform has achieved success without teachers committing themselves to it; no school has improved without the commitment of teachers (P.1).

In this regard, the finding of this research reveals lack of motivation and commitment on the part of the majority of teachers. The source of teachers' lack of commitment is related to dissatisfaction with their low life standard of teachers as compared to other public servants of the same qualification and experience serving in other public institutions.

To secure the motivation and commitment of teachers, the central issue is giving attention to improving the life standard of teachers. Teachers believe that there should be incentives to compensate for teachers' low income and life standard. In this regard, the most frequently suggested mechanism by teachers was provision of land for building house or making teachers a "house owner" by any other possible mechanism by the Government. Thus, one of the compensation mechanisms could be enabling teachers to possess house, as several interview teachers suggested. Cognizance of the pivotal role of teachers and the teaching profession to the socio-economic development of the country, to the citizens, and for promoting equity, the government should committed to realize the aforementioned teachers' ambition. To this effect, well studied, sustainable policy-based strategy that enables both the current and coming generations of teachers to passer house is required. If realized, this compensation plan has the potential to attract and retain competent teaching force.

Other strategies to improve teachers' motivation and commitment involve (a) cultivating the public-community's respect to teachers; (b) making the workplace-environment conducive to teachers, which include building staff residence-house in those schools in rural district towns and villages.

Ensure block grant allocation to schools that considers price inflation. Equitable allocation of government block grant allocation to schools should be ensured across Districts and Municipalities. It is important to have fair and up-to-date formula that considers the current market price inflation rate of goods and services for the allocation of block grant to schools by local education authorities - the Districts and the Municipalities. To effect sustainable school improvement, the financial capacity of schools augmented by school grant program and the increased participation of the community should not be offset by reduced block grant allocation by local authorities. It is essential to spend money secured from parents and/or the community for developmental purposes, such as fulfilling physical

facilities and services as opposed spending on running expenses. The government block grant should be able to cover at least the recurrent day-to-day running costs of teaching learning process. Minimally, consideration of price inflation (or current purchasing power of money) needs to be in place for equitable and meaningful financial support to schools by local education authorities. If possible, it is important to increase non-salary block grant appropriation formula of twenty birr per student to 30 birr or more.

Besides, offering special incentive fund (grant) for better performing schools in school improvement endeavor very important to ensure the sustainability of school improvement program. Hence, school financial capacity is the most determinant factor to solve the problem of the inadequacy of physical facilities and services identified in this research.

Build university-school partnerships. In order to build and institutionalize staff performance as professional learning community, university-school partnerships has paramount importance. Such partnerships should primarily focus on jointly identified school-based CPD projects for teachers and school principals to improve the learning and learning outcome of students in all or some selected subjects. In addition, the partnership should focus on making least effective schools become effective so that lessons and experiences obtained from these schools would be scaled up to schools in similar contexts. Furthermore, university provision of material support and short term training on identified needs are also important to reduce temporary school capacity gaps.

Build school improvement research program. Sustainable school improvement requires consistent and long term focus on school improvement strategies with the pivotal focus upon improving student learning outcome and the conditions that support student learning and (Fullan, 2007, Hopkins, 2005). Context based, agreed-upon strategies to improve student learning and learning outcome has paramount importance for success (EFA, 2005, Hopkins, 2005). Such school improvement theory and knowledge in developed countries has

foundation in longitudinal case studies on small scale projects that were designed and set into implementation with certain underlying assumptions about changing organizational behavior of school in a way that improves student learning and learning outcome. Thus, in our case, building school improvement research program would enable the country to obtain context based empirical knowledge and understanding about what works and what is not. As a result, such context based knowledge of school improvement will lead to develop school improvement model that best fits to the context of the country.

5.4. Implications (Theoretical and for Research).

In the literature, the two theoretical constructs that form the key dimensions of school capacity for sustainable improvement are *leadership capacity* and *staff performance as collaborative and learning professional community*. The resulting social and intellectual assets accompanying staff performance as collaborative professional learning community are the most important capacity ingredient for sustainable school improvement (e.g., Hargreaves, 2001; Harris, 2002; Harris & Muijs, 2005; Mitchell & Sackney, 2009; O'Donoghue & Clarke, 2010).

With regard to the former (school leadership), the finding of this research implies that *a one person positional leadership model* is inadequate to apply to study the practice of school leadership and its impact on student learning and learning outcome in secondary schools that are successfully implementing SIP. School leadership practice in such schools is best conceptualized in terms of *distributed leadership*, mainly the *shared leadership of teachers* in which the teacher leadership plays the pivotal role in all of the four dimensions of school principal leadership practices in “Leithwood and the colleagues’ (2005) model” setting directions, developing people, redesigning organization, and managing the teaching and learning program.

As the finding of this study reveals, through participatory group-process with teacher leaders, the main task of school principal is setting strategic direction (setting priority goals, objectives, and targets) for school improvement and student learning outcome; and communicating these goals, objectives and targets to department heads, teachers, students and parents. Accordingly, each department prepares its instructional plan for improving student learning and learning outcome with specific improvement objectives and targets, the mechanism for monitoring the implementation of the plan; and evaluating performance and reporting to school principals.

This implies that research designs to assess school leadership practice and/or its effect on student learning outcome in secondary schools that are performing well in implementing SIP should consider both the leadership of the school principal and the shared leadership of teachers. In these schools, a one-person leadership practice model of research design neither the “transformational leadership model of Leithwood and the colleagues”, nor the “directive instructional leadership model of Hallinger and the colleagues” is inadequate to assess school leadership practice and its impact on student learning outcome (achievement).

Given the structures and the practice of shared leadership of teachers explained in this study, teacher shared leadership (at departmental and middle level management) in secondary schools implementing school SIP can be conceived in terms of *aligned shared leadership practice* to that of the leadership practice dimensions of school principal, but with teacher shared leadership be more specific and directly focused on group targets. That is, teacher shared leadership practice in these schools can be best conceptualized in terms of the following seven leadership practice dimensions: (i) *setting direction* - promoting vision, values, and goals of school through participatory process; setting group goal, objectives and targets in line with that of the school; putting high performance expectation on group

members, follow up and monitoring of group performance; (ii) *developing teachers* - providing to teachers individualized support, intellectual stimulation and the modeling of values and practices important to achieve the mission of the school; (iii) *organizing and coordinating teams/groups* in a way that focuses group effort on the priority objectives and targets of the department and the school, but with the main emphasis on improving student learning and learning outcome; (iv) *building collaborative culture* in which colleagues are motivated by moral imperatives for improving student learning and learning outcome, actively involved in shared decision-making and problem solving; (v) *building staff learning culture* in which teachers are actively involved in individual and group learning (experience sharing, dialogue and reflection on practice) so as to develop their professional competence and promoting student learning and learning outcome; (vi) *building positive relationships within the group and across the whole school community* in which “group” as well as “whole-school” sense of collective responsibility for improving student learning outcome is ensured and fostered; (vii) *focus group effort on the teaching learning (instructional) program* and activities that have strong impact to improving student learning and learning outcome.

With regard to staff performance as collaborative professional community, the finding of this study shows that the “collaborative norm” of the staff prevails over the “learning norm” of the staff. In the study, six attributes (or organizational arrangements) of professional learning community of teachers were included in survey questionnaire by adapting to school improving framework of Ethiopia. Later after data collection, applying EPFA at Eigen value greater than one and direct Oblimin rotation yielded five components that together explain 59.37 % of the total variance in PLC scale. Component 1 is shared values, vision and collaborative culture, which explains the greatest proportion (37.52%) of the variance in PLC. This entails PLC development stage in the schools, where “collaborative norm” of the

staff predominate the “learning norm” of the staff. The learning norm of the staff through school-based CPD as well as through various forms of collaborative learning opportunities was low as compared to collaborative norm of the staff.

REFERENCES

- ADC (2011). Manual capacity development: Guideline for improving strategic approaches and methods in Austrian Development Cooperation (ADC). Viena: ADA
- Agbo, S. A. (2007). Addressing school-community relations in a cross-cultural context: A collaborative action to bridge the gap between First Nations and the School. *Journal of Research in Rural Education*, 22(8), 1-14. Retrieved from <http://jrre.psu.edu/articles/22-8.pdf>
- Aloysius, O. I. (2013). Perception of empowerment among international students at the University Putra Malaysia. *International Journal of Business and Management*, 8 (23), 93-99.
[doi:10.5539/ijbm.v8n23p93](https://doi.org/10.5539/ijbm.v8n23p93)
- Amare, A. Daniel, D., Derebssa, D., Wanna, L., Leu, E., Barrow, K., & Price-Rom, A. (2006). Teachers and Principals' perceptions of quality of education. *The Ethiopian Journal of Education*, 26(2), 1-23.
- Ary, D., Jacobs, L. C., & Sorensen, C. (2010). *Introduction to research in education* (8th ed.). Belmon; CA: Wadsworth.
- Auerbachand, C. F., & Silverstein, L. (2003). *Qualitative data analysis: An introduction to coding and analysis*. New York: New York University Press.
- Avalos, B. (2007). School improvement in Latin America: Innovations over 25 years (1980-2006). In T. Townsend et al. (Eds.), *International handbook of school effectiveness and improvement* (Part I, Vol. 17, pp. 183–204). Dordrecht: Springer.
- Barnett, A. M. (2003). The impact of transformational leadership style of the school principal on school learning environments and selected teacher outcomes: A preliminary report. Paper presented at NZARE AARE, Auckland, New Zealand, November 2003. Retrieved from <http://www.aare.edu.au/03pap/bar03777.pdf> for [baro3777.pdf](http://www.aare.edu.au/03pap/baro3777.pdf)

- Biesta, G. J. J., & Burbules, N. C. (2003). *Pragmatism and educational research*. Lanham: Rowman & Littlefield Publishers.
- Bîrzea, C., Cecchihini, M., Harrison, C. Krek, J., & Spajic-Vrkaš, V. (2005). *Tool for quality assurance of education for democratic citizenship in schools*. Paris: UNESCO/Council of Europe.
- Blandford, S. (2005). *Managing professional development in schools*. London: Routledge.
- Bolam, R., & McMahon, A. (2004). Literature, definitions and models: Towards conceptual map. In Day, C., & Sachs, J. (Eds.). *International handbook on continuing professional development of teachers* (pp. 33-56). London: Open University Press.
- Bolam, R. McMahon, A., Stoll, L., Thomas, S., & Wallace, M. (2005). Creating and sustaining effective professional learning communities (Research Report No.637), University of Bristol, Department for Education and Skills. Retrieved from <http://dera.ioe.ac.uk/5622/1/RR637.pdf>
- Brooke-Smith, R. (2003). *Leading learners, leading schools*. London and New York: RoutledgeFalmer.
- Caldwell, B.J. (2000). Leadership in the creation of world-class schools. In K.A. Riley, & K. S. Louis (Eds.), *Leadership for change and school reform: International perspectives* (pp. 67-81). London: RoutledgeFalmer.
- Caldwell, B. J., & Spinks, J. M. (2008). *Raising stakes: From improvement to transformation in reform of schools*. New York: Routledge.
- Cameron, E., & Green, M. (2009). *Making Sense of Change Management* (2nd ed.). A complete guide to the models, tools & techniques of organizational change. London: KoganPage.

- Caprio, T. (Ed.). (2008). *Guidelines for Capacity Development in the Education Sector: Within the Education For All - Fast Track Initiative Framework*. Retrieved from <http://www.education-fast-track.org>
- Chapman, C., & Sammons, P. (2013). *School self-evaluation for school improvement: What works and why?*. London: CfBT Education Trust.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in Education* (6th ed.). London: Routledge.
- Craft, A. (2000). *Continuing professional development of teachers: A practical guide to teachers and schools* (2nd ed.). London: RoutledgeFalmer.
- Creswell, J.W. (2009). *Research design: quantitative, qualitative, and mixed methods Approaches* (3rd ed.). Los Angeles: SAGE Publications.
- _____. (2012). *Educational research: planning, conducting and evaluating quantitative and qualitative research* (4th ed.). Boston: Pearson.
- Davies, B., & Ellison, L. (2003). *New strategic direction and development of school. Key frameworks for school improvement planning* (2nd ed.). London: RoutledgeFalmer.
- Davies, B., Ellison, L. & Bowring-Carr, C. (2005). *School leadership in the 21st century: Strategic approach* (2nd ed.). London and New York: RoutledgeFalmer.
- Day, C., & Sachs, J. (2004). Professionalism, performativity and empowerment: Discourses in the politics, policies and purposes of continuing professional development. In C. Day, & J. Sachs (Eds.). *International Handbook on continuing professional development of teachers* (pp. 3-29), London: Open University Press.
- Day, C., & Sammons, P. (2013). *Successful leadership: A review of the international literature*, London: CfBT Education Trust.

- Day, C., Sammons, P., Leithwood, K., Hopkins, D., Gu, Q., Brown, E., & Ahtaridou, E. (2011). *Successful school leadership: Links with learning and achievement*. England: Open University Press.
- Day, C., Sammons, P., Stobart, G., Kingston, A., & Gu, Q. (2007). *Teachers matter: Connecting work, lives and effectiveness*. New York: Open University Press.
- Deal, T. E., & Peterson, K. D. (1999). *Shaping school culture: The heart of leadership*. San Francisco: Jossey-Bass.
- _____. (2009). *Shaping school culture: Pitfalls, paradoxes, and promises* (2nd ed.). San Francisco: Jossey-Bass.
- Derebssa, D. (2006). Prospects and challenges of achieving the Millennium Development Educational Goals in Ethiopia: Where does Ethiopia stand on EFA Goals? *The Ethiopian Journal of Education*, 26(2), 25-56.
- Dey, I. (1993). *Qualitative data analysis: A user-friendly guide for social scientists*. London: Routledge.
- Donaldson, G. A. Jr. (2006). *Cultivating leadership in schools: Connecting people, purpose and practice* (2nd ed.). New York: Teachers College.
- Driscoll, M. E., & Goldring, E. B. (2005). How can school leaders incorporate communities as contexts for student Learning?. In W. A. Firestone, & C. Riehl (Eds.), *A new agenda for research in educational leadership* (pp. 61-80), New York: Teachers College Press.
- Duignan, P., & Cannon, H. (2011). *The power of many: Building sustainable collective leadership in Schools*. Victoria: Australian Council of for Education Research Ltd.
- Durrant, J., & Holden, G. (2006). *Teachers leading change: Doing research for school improvement*, London: Paul Chapman Publishing.
- Earley, P., Higham, R., Allen, R., Allen, T., Howson, J., Nelson, R., . . . Sims, D. (2012). *Review of the school leadership landscape*. Nottingham; National College for School Leadership.

- Earley, P., & Weindling, D. (2004). *Understanding school leadership*. London: Paul Chapman Publishing.
- EFA (2005). *Education for All (EFA) Global Monitoring Report 2005: The quality imperative*, Paris: UNESCO Publishing.
- EQAO (2005). *EQAO Guide to School and Board Improvement Planning Guide: A handbook for School and Board Leaders*. Toronto: Education Quality and Accountability Office (EQAO).
- FDRE (1995). *The constitution of Federal Democratic Republic of Ethiopia (Federal Negarit Gazeta No. 1)*. Addis Ababa.
- FDRE (2010). *Growth and Transformation Plan (GTP) 2010/11-2014/15, Vol. 1: Main Text*. Addis Ababa: MoFED.
- Fink, D. (2005). *Leadership for mortals: Developing and sustaining leaders of learning*. London: SAGE Publications.
- Fleming, J., & Kleinhenz, E. (2007). *Towards a moving school*, Victoria: ACER. Fredricks, J. A. & McColskey, W. (2012). The measurement of student engagement: A comparative analysis of various methods and student self-report. In S.L. Christenson et al. (Eds.), *Handbook of research on student engagement* (pp. 763-779). doi: [10.1007/978-1-4614-20187_37](https://doi.org/10.1007/978-1-4614-20187_37)
- Fullan, M. (1998). Breaking the bonds of dependency. *Educational Leadership*, 55(7), 4–9.
- _____. (2003). *Change forces with a vengeance*. London: RoutledgeFalmer.
- _____. (2005). *Change forces: The sequel*. London: Taylor & Francis e-Library.
- _____. (2006). *Change theory: A force for school improvement (Seminar Series Paper No. 157*. November 2006). Centre for Strategic Education. Retrieved from https://docs.google.com/...4EJ:www.michaelfullan.ca/Articles_06/06_change_theory.pf.
- _____. (2008). *What's worth fighting for in the principalship?* (2nd ed.). New York: Teachers College.

- Gay, L. R., Mills, G. E., & Airasian, P. (2009). *Educational research: competencies for analysis and applications* (9th ed.). California: Pearson.
- Gelsthorpe, T. (2003). Engaging communities and schools. In T. Gelsthorpe, & J. West- Burnham (Eds.), *Educational leadership and the community: Strategies for school improvement through community engagement* (pp.15-30). London: Pearson Education Limited.
- Glickman, C. D., Gordon, S.P., & Ross-Gordon, J. M. (2007). *Super Vision and Instructional leadership: A developmental Approach* (7th ed.). Boston: Pearson Education.
- Gorard, S. (with Taylor, C.). (2004). *Combining methods in educational and social research*. New York: Open University Press.
- Gordon, S. T. (2004). *Professional development for school Improvement: Empowering Learning Communities*. Boston: Pearson.
- Hall, P., & Simeral, A. (2008). *Building teachers' capacity for success: A collaborative approach for coaches and school leaders*, Alexandria: Association for Supervision and Curriculum Development.
- Hallinger, P. (2003). Leading educational change: Reflections on the practices of instructional and transformational leadership. *Cambridge Journal of Education*, 33(3). 329-352. doi: [10.1080/0305764032000122005](https://doi.org/10.1080/0305764032000122005)
- Hallinger, P., & Heck, R. H. (2009). Distributed leadership in schools: Does system policy make a difference?. In A. Harris (Ed.). *Studies in educational leadership*, Vol. 7. *Distributed leadership: Different perspectives* (pp. 101-117). Springer Science+Business Media B.V. 2009 (e-ISBN 978-1-4020-9737-9). doi: [10.1007/978-1-4020-9737-9](https://doi.org/10.1007/978-1-4020-9737-9)
- _____. (2010). Collaborative leadership and school improvement: Understanding the impact on school capacity and student learning, *School Leadership & Management*. 30 (2), 95-110. doi: [10.1080/13632431003663214](https://doi.org/10.1080/13632431003663214)

- Hargreaves, D. (2001). A capacity theory of school effectiveness and improvement. *British Educational Research Journal*, 27(4), 447-501. doi: 10.1080/0141192012007148 9
- Harris, A. (2002). *School improvement: What's in it for schools?* London: RoutledgeFalmer.
- _____. (2008). *Distributed leadership in schools: Developing the leaders of tomorrow*. London, Routledge.
- _____. (2009). Introduction. In A. Harris (Ed.), *Studies in Educational Leadership*, Vol. 7. *Distributed leadership: Different perspectives* (pp. 3-10). Springer Science+Business Media B.V. 2009 (e-ISBN 978-1-4020-9737-9). doi: 10.1007/978-1-4020-9737-9
- Harris, A., Day, C., Hadfield, M., Hopkins, D., Hargreaves, A., & Chapman, C. (2003). *Effective leader for school improvement*. New York: RoutledgeFalmer-Taylor Francis Group.
- Harris, A., & Lambert, L. (2003). *Building leadership capacity for school improvement* Philadelphia: Open University Press.
- Harris, A., & Muijs, D. (2005). *Improving schools through teacher leadership*. London: Open University Press.
- Harvey, L., (2004-13). *Analytic quality glossary: Quality research international*. Retrieved from <http://www.qualityresearchinternational.com/glossary/>
- Hesse-Biber, S.N. (2010). *Mixed methods research: Merging theory with practice*. New York: Guilford Press.
- Hopkins, D. (2001). *School improvement for real*. London: RoutledgeFalmer.
- _____. (2005). Introduction: Tensions in and prospects for school improvement. In D. Hopkins (Ed.), *The practice and theory of school improvement: International handbook of educational change* (pp. 1-21). Dordrecht: Springer.
- Hopkins, D. Harris, A. Stoll, L., & Mackay. (2010). School and system improvement: State of the art review. Key note presentation prepared for the 24th International Congress of School

- Effectiveness and School Improvement, Limassol, Cyprus, 6th January 2011. Retrieved from http://www.icsei.net/icsei2011/State_of_the_art/...C.pdf
- Hopkins, D., & Reynolds, D. (2001). The past, present and future of school improvement: Towards the third age. *British Educational of Research Journal*. 27(4), 459-475.
- Hord, S. M. (1997). *Professional learning communities: Communities of inquiry and continuous improvement*: Austin, Texas: Southwest Educational Development Laboratory. Retrieved from <http://www.sedl.org/pubs/change34/plc-cha34.pdf#page=3&zoom=auto,0,612>
- Hoy, W. K., & Miskel, C. G. (2005). *Educational administration: Theory, research, practice* (4th ed.). New York: Mcgraw-Hill.
- Hussien, K. K. (2013). School improvement program in Ethiopia: Analysis of implementation in the context of decentralization – The case of Oromia National Regional State. Ph D Dissertation (Unpublished), Addis Ababa University. Ethiopia
- Jackson, D. S. (2000). The school improvement journey: Perspectives on leadership. *School leadership & management*, 20 (1), 61-78. doi: 10.1080/13632430068888
- Johnson, B., & Christensen, L. (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). Los Angeles: SAGE Publications.
- Johnson, Jr., B.L. (2009). Understanding schools as Organizations: Implications for realizing professional learning communities. In C.A. Mullen (Ed.). *The handbook of leadership and professional learning communities* (pp.17-28). New York: Palgrave Macmillan.
- Jones, R. D. (2009). *Student engagement: Teacher handbook*. New York: International Center for Leadership in Education.
- Kilbane, Jr. J. F. (2009). Factors in sustaining professional learning community. doi: 10.1177/0192636509358923, <http://bul.sagepub.com/cgi/content/abstract/93/3/184>
- Krüger, M., & Scheerens, J. (2012). Conceptual perspectives on school leadership. In J. Scheerens (Ed.). *School leadership effects revisited: Review and meta-analysis of empirical studies*

(Springer Briefs in Education, pp.1-30). Dordrecht: Springer. doi: 10.1007/978-94-007-2768-7

Lambert, L. (2003). *Leadership capacity for lasting school improvement*, Alexandria: Association for Supervision and Curriculum Development.

Leach, H. (2010). Improving school quality: A review of the literature. Retrieved from http://www.icielementaryeducation.org.in/uploads/pdf/cms_291020100534266944.PDF

Leithwood, K. (2003). Teacher leadership: Its nature, development, and impact on schools and students. In M. Brundrett, N. Burton, & R. Smith (Eds.). *Leadership in education* (pp.103-117). London: SAGE Publications.

Leithwood, K., Begley, P.T., & Cousins, J. B. (1994). *Developing expert leadership for future schools*. London: The Falmer Press.

Leithwood, K. Harris, A., & Hopkins, D. (2008). Seven strong claims about successful school leadership. *School Leadership & Management*, 28(1), 27-42. doi: 10.1080/13632430701800060

Leithwood, K., & Jantzi, D. (1999a). The relative effects of principal and teacher sources of leadership on student engagement with school. *Educational Administration Quarterly*, 35, 679-706. doi: 10.1177/0013161X99355002

_____. (1999b). Transformational leadership effects: A replication. *School Effectiveness and School Improvement*. 10(4), 451-479. Retrieved from

<http://www.highreliability.co.uk/Shared/SchoolImprovement.aspx>

_____. (2000). The effects of different sources of leadership on student engagement in school. In K. A. Riley, & K. S. Louis (Eds.), *Leadership for change and school reform: International perspectives* (pp. 50-63). London: RoutledgeFalmer.

_____. (2005). A review of transformational school leadership research 1996–2005. *Leadership and Policy in Schools*, 4(3), 177-199. doi: 10.1080/15700760500244769

- _____. (2006). Transformational school leadership for large-scale reform: Effects on students, teachers, and their classroom practices. *School Effectiveness and school improvement: An International Journal of Research, Policy and Practice*, 17(2), 201-227. Retrieved from <http://dx.doi.org/10.1080/09243450600565829>
- Leithwood, K.A., Jantzi, D., & Steinbach, R. (Eds). (1999). *Changing leadership for changing times*. Philadelphia: Open University Press.
- Leithwood, K., & Louis, K.S. (2000). *Organisational Learning in schools*. Netherlands: Swets and Zeitlinger.
- Leithwood, K., Louis, K.S., Wahlstrom, K., Anderson, S., Mascall, B., & Gordon, M. (2010). How successful leadership influences student learning: The second installment of a longer story. In A.Hargreaves et al. (Eds.). *Second international handbook of educational change* (Vol. 23, Part 1, pp. 611-629). Dordrecht: Springer. doi: 10.1007/978-90-481-2660-6_35
- Leithwood, K., Mascall, B., Starauss, T., Sacks, R., Memon, N., & Yashkina, A. (2009). Distributing leadership to make schools smarter: Taking the ego out of the system. In K. Leithwood, B. Mascall, & T. Strauss (Eds). *Distributed leadership according to the evidence* (pp. 223-252). New York: Routledge.
- Leithwood, K., & Riehl, C. (2005). What do we already know about educational Leadership? In W. A. Firestone & C. Riehl (Eds.), *A new agenda for research in educational leadership* (pp. 12-27). New York: Teachers College Press.
- Leonard, J. C. (2010). *Finding time for instructional leadership: Strategies for strengthening the academic program*. New York: Rowman & LittleField Publishing.
- Lezotte, L. (1991). *Correlates of effective schools: The first and second generation*. Okemos: Effective Schools Products.
- Lezotte, L. (2001). *Revolutionary and evolutionary: The effective schools movement*. Okemos: Effective Schools Products, Ltd.

- Lieberman, A., & Miller, L. (2007). Transforming professional development: Understanding Organizational Learning Communities. In W. D. Hawley with D. L. Rollie (Eds.), *The keys to effective schools: Educational reforms as continuous improvement* (2nd ed., pp. 99-116). London: Corwin Press.
- Lingard, B., Hayes, D., Mills, M., & Christie, P. (2003). *Leading learning: Making hope practical in schools*. Philadelphia: Open University Press
- Little, J.W. (2007). Professional communication and collaboration. In W. D. Hawley with D. L. Rollie (Eds.). *The keys to effective schools: Educational reforms as Continuous Improvement* (2nd ed., pp. 51-65). London: Corwin Press.
- Lord, J., & Hutchison, P. (1993). The process of empowerment: Implications for theory and practice. *Canadian Journal of Community Mental Health*, 12 (1), 5-22.
- Mace-Matluck, B. J. (1987). The effective schools movement: Its history and context (An SEDLL Monograph). Retrieved from <http://home.comcast.net/~reasoned/4410/PDFonCRM/Effective%20School%20Prac.pdf>
- MacGregor, R. (2005). *School improvement planning process guide*. Washington State: Office of Superintendent of Public Instruction. Retrieved from <http://k12.wa.us/StudentAndSchoolSuccess/SIPGuide/SIPGuide.pdf>
- McLaughlin, M. W. & Talbert, J. E. (2006). *Building school-based teacher learning communities: Professional strategies to improve student achievement*. New York: Columbia University Teachers College Press.
- McIntyre, A. (2011). *Continuous school improvement—What Matters Most*. Australia: The Winston Churchill Memorial Trust.
- McQuillan, P.J. (2005). Possibilities and pitfalls: A comparative analysis of student empowerment. *In American Educational Research Journal*, 42(4), 639–670. doi: [10.3102/00028312042004639](https://doi.org/10.3102/00028312042004639)

- Mercer, J., Barker, B., & Bird (2010). *Human resource management in education: contexts, themes and impact*. London: New York, NY: Routledge.
- Mertens, D.M. (2010). *Research and evaluation in Education and Psychology. Integrating diversity within quantitative, qualitative, and mixed Methods* (3rd ed.), Los Angeles: SAGE Publications.
- Middlewood, D. Parker, R., & Beere, J. (2005). *Creating a learning school*. London: Paul Chapman Publishing
- Miles, M. B., & Huberman, A.M. (1994). *Qualitative data analysis* (2nd ed.). London: SAGE Publications.
- Mitchell, C. & Sackney, L. (2009). *Sustainable improvement: Building learning communities that endure*. Rotterdam: Senge Publishers.
- MoE (1994). *Education and training policy of Ethiopia*. Addis Ababa: EMPDA.
- _____. (1994/5). *Education Statistics Annual Abstract*. Addis Ababa: EMPDA.
- _____. (1999/00). *Education statistics annual abstract (1999-2000)*. Addis Ababa: Birhanena Selam Printing Enterprise.
- _____. (2006a). *General education quality assurance package*. Addis Ababa: EMPDA.
- _____. (2006b). *School improvement framework guideline* (Blue print). Addis Ababa: EMPDA.
- _____. (2006c). *School improvement framework*. Addis Ababa: EMPDA.
- _____. (2008). *General education quality improvement package* (GEQIP). Retrieved from <http://www.moe.gov.et>
- _____. (2009). *Continuous professional development for Primary and Secondary School Teachers, Leaders and Supervisors in Ethiopia: The framework*. Retrieved from <http://www.moe.gov.et>
- _____. (2010a). *Education Sector Development Program IV (ESDP IV): Program Action Plan*. Retrieved from <http://www.moe.gov.et>

- _____. (2010b). Map capacity development design study (RFP/GEQIP/QCBS/C-05/09). Final Report. Addis Ababa. Retrieved from <http://www.moe.gov.et>
- _____. (2010c). School improvement guidelines (Final draft): Improving the quality of education and student results in all primary and secondary schools. Retrieved from <http://planipolis.iiep.unesco.org/upload/Ethiopia/...pdf>
- _____. (2011). *Revised school improvement framework implementation guideline*. Addis Ababa: Andinet Printers.
- _____. (2012). *National professional standards for school Principals*. Retrieved from <http://www.moe.gov.et>
- _____. (2010/11). *Education statistics annual abstract (2010/11)*. Addis Ababa: MoE. Retrieved from <http://www.moe.gov.et>
- _____. (2011/12). *Education statistics annual abstract (2011/12)*. Addis Ababa: MoE. Retrieved from <http://www.moe.gov.et>
- _____. (2012/13). *Education statistics annual abstract (2012/13)*. Addis Ababa: MoE. Retrieved from <http://www.moe.gov.et>
- _____. (2013/14). *Education statistics annual abstract (2012/13)*. Addis Ababa: MoE. Retrieved from <http://www.moe.gov.et>
- _____. (2014/15). *Education statistics annual abstract (2012/13)*. Addis Ababa: MoE. Retrieved from <http://www.moe.gov.et>
- _____. (2015). Education Sector Development Program V (ESDP V) 2015/16 - 2019/20: Program Action Plan. Retrieved from http://planipolis.iiep.unesco.org/sites/planipolis/files/ressources/ethiopia_esdp_v.pdf
- Mooney, N. J., & Mausbach, A.T. (2008). *Align the design: A blue print for school improvement*, Alexandria: Association for Supervision and Curriculum Development.

- Moos, L., & Huber, S. (2007). School leadership, school effectiveness, and school improvement: Democratic and integrative leadership. In T. Townsend et al. (Eds.), *International handbook of school effectiveness and improvement* (Part I, Vol. 17, pp. 579–596). Dordrecht: Springer.
- Muijs, D., Day, C., Harris, A., & Lindsay, G. (2004). Evaluating CPD: An overview. In C. Day, & J. Sachs (Eds.). *International handbook on continuing professional development of teachers* (pp. 291-310). London: Open University Press.
- Mullen, C. A. (2009). Introducing collaborative communities with edge and vitality. In C.A. Mullen (Ed.). *The handbook of leadership and professional learning communities* (pp.1-9). New York: Palgrave Macmillan.
- Murray, F., & Feitler, F.C. (1989). An investigation of transformational leadership and organizational effectiveness in small college settings. A paper presented at the annual meeting of American Educational Research Association, San Francisco, California. March 27-31. Retrieved from <http://www.highreliability.co.uk/Shared/SchoolImprovement.aspx>
- NEAEA (2013). Ethiopian Fourth National Learning Assessment of Grade 4 and 8 Pupils. Addis Ababa: NEAEA/USAID.
- Newmann, F.M. (Ed.). (1992). *Student engagement and achievement in American secondary Schools*. New York: Teachers College, Columbia University.
- Nguni, S. Slegers, P., & Denessen, E. (2006). Transformational and transactional leadership effects on teachers' job satisfaction, organizational commitment, and organizational citizenship behavior in primary schools. *An International Journal of Research, Policy and Practice*, 17 (2), 145-177. Retrieved from <http://dx.doi.org/10.1080/09243450600565746>
- NPC (2016). Growth and Transformation Plan 2015/16 – 2019/20. Addis Ababa: National Planning Commission (NPC).
- NOE (2004a). *Ethiopian second national learning assessment of Grade 4 students*. Addis Ababa: National Organization of Examination (NOE)/BESSO.

- NOE (2004b). *Ethiopian second national learning assessment of Grade 8 students*. Addis Ababa: National Organization of Examination (NOE)/USAID.
- O'Donoghue, C., & Clarke, S. (2010). *Leading learning: Process, themes, and issues in international perspective*. New York: Routledge.
- OECD (2006). *The challenge of capacity development: Working towards good practice*. DAC guidelines and reference series. Paris. Retrieved from www.oecd.org/dataoecd/4/36/36326495.pdf
- _____. (2008). *Measuring improvements in learning outcomes: Best practices to assess the value-added of schools*. Paris: OECD.
- Olivier, D. F., Hipp, K. K., & Huffman, J. B. (2008). Assessing and analyzing schools as PLCs. In K. K. Hipp & J. B. Huffman (Eds.). *Professional learning communities: Purposeful actions, positive results*. Lanham: Rowman & Littlefield.
- Oromia Bureau of Finance and Economic Development (OBoFED, 2009). *Physical and socio-economic profile of Oromia (Regional Data and Information Core Process)*. Finfinne: OBoFED.
- Oromia Education Bureau (OEB, 2014). *Public mobilization plan prepared for realization of Millennium Development Goals and General Education KGT*. Finfinne: Oromia Education Bureau (OEB).
- Patton, M. Q. (1990). *Qualitative evaluation and research Methods* (2nd ed.). CaliforniaSage Publications.
- Peterson, K. D., & Deal, T.E. (2009). *Shaping school culture fieldbook* (2nd ed.). San Francisco: Jossey-Bass.
- _____. (2002). *The shaping school culture fieldbook*. San Francisco: John Wiley & Sons.
- Reddy, S. (2007). *School quality: Perspectives from the developed and developing Countries*. Retrieved from <http://www.azimpremjifoundation.org/pdf/...yreport.pdf>

- Riddell, A. R. (1998). Reforms of educational efficiency and quality in developing countries: An overview. *The Journal of Comparative and International Education*, 28 (3), 277-291.
- Reynolds, D. (2005). "World Class" school improvement: An analysis of the implications of recent international school effectiveness and school improvement research for improvement practice. In D. Hopkins (Ed.). *The practice and theory of school improvement: International handbook of educational change* (pp. 241-251). Dordrecht: Springer.
- Reynolds, R. Hopkins, D., & Stoll, L. (1993). Linking school effectiveness knowledge and school improvement practice: Towards a synergy. *School Effectiveness and School Improvement*, 4(1), 37-58.
- Ross, J.A., & Gray, P. (2006). Transformational leadership and teacher commitment to organizational values: The mediating effects of collective teacher efficacy *School Effectiveness and School Improvement* 17 (2). Retrieved from <http://gsueds2007.pbworks.com/f/RossGray.pdf>
- Sammons, P., Hillman, J., & Mortimore, P. (1995). *International school effectiveness and improvement*. London: OFESTED.
- Scheerens, J. (2000). *Improving school effectiveness*. Paris: UNESCO/IIEP.
- _____. (2005). The school effectiveness knowledge base as a guide for school improvement. In D. Hopkins (Ed.). *The practice and theory of school improvement: International handbook of educational change* (pp. 62-84). Dordrecht: Springer.
- Schlechty, P. C., (2009). *Leading for learning*. San Francisco: John Wiley & Sons Inc.
- Scott, D., & Morrison, M. (2006). *Key ideas in educational research*. New York: Continuum International Publishing Group.
- Seidman, I. (2006). *Interviewing as Qualitative Research* (3rd ed.). New York: Teachers College Press.
- Sergiovanni, T. J. (2001). *Leadership: What's in it for schools?*. London, Routledge Falme

- Silins, H., & Mulford, B. (2007). Leadership and school effectiveness and improvement. In T. Townsend (Ed.), *International handbook of school effectiveness and improvement* (Part I, Vol. 17, pp. 635–658). Dordrecht: Springer.
- Spillane, J. P., Camburn, E.M., Pustejovsky, J., Pareja, A.S., & Lewis, G. (2009). Taking a distributed perspective in studying school leadership and management: The challenge of study operations. In A. Harris (Ed.). *Studies in educational leadership* Vol.7. *Distributed leadership: Different perspectives* (pp. 47-80). doi: [10.1007/978-1-4020-9737-9](https://doi.org/10.1007/978-1-4020-9737-9)
- Spillane, J. P., & Healey, K. (2010). Conceptualizing school leadership and management from distributive perspective: An exploration of some study operations and measures. *Elementary School Journal*, *111*(2), 253-281.
- Stoll, L. (1999). Realising our potential: Understanding and developing capacity for lasting improvement. *School Effectiveness and School Improvement*, *10*(4), 503-532. Retrieved from http://www.highreliability.co.uk/Files/Downloads/School_improvement/LS1999.pdf
- _____. (2009). Capacity building for school improvement or creating capacity for learning: Changing landscape. *Journal of Educational Change*, *10*(2), 115-127.
- _____. (2010). Connecting learning communities: Capacity building for systemic change. In A. Hargreaves et al. (Eds.), *Second international handbook of educational change* (Vol. 23, Part 1, pp. 469-484). Dordrecht: Springer. doi: [10.1007/978-90-481-2660-6_28](https://doi.org/10.1007/978-90-481-2660-6_28)
- Stoll, L., Bolam, R., McMahon, A. Wallance, M., & Thomas, S. (2006). Professional Learning Communities: A review of the literature. *Journal of Educational Change*, *7*, 221–258, doi: [10.1007/s10833-006-0001-8](https://doi.org/10.1007/s10833-006-0001-8)
- Stoll, L., & Fink, D. (1996) *Changing our schools: Linking school effectiveness and school improvement*. Buckingham: Open University Press.
- Stoll, L., & Louis, K.S. (2007). *Professional learning communities: Divergence, depth an dilemmas*. New York: Open University Press.

- Taylor, L., & Parsons, J. (2011). Improving student engagement. *Current Issues in Education*, 14(1), 1-33. Retrieved from <http://cie.asu.edu/>
- Teddle, C., & Stringfield, S. (2007). A history of school effectiveness and improvement research in the USA focusing on the past Quarter Century. In T. Townsend et al. (Eds.), *International handbook of school effectiveness and improvement* (Part I, Vol. 17, pp. 135-166). Dordrecht: Springer.
- Thoonen, E. E., Slegers, P. J., Oort, F. J., & Peetsma, T. T. (2012). Building school-wide capacity for improvement: The role of leadership, school organizational conditions, and teacher factors. *School Effectiveness and School Improvement: An International Journal of Research, Policy and Practice*, 23 (4), 441-460. doi: 10.1080/09243453.2012.678867
- UNDP (2009). Capacity development: A UNDP Primer. New York: Capacity Development Group. Retrieved from <http://www.undp.org/capacity-development>
- UNESCO (2005). *School management: A training manual for educational management*. UNESCO International Institute for Capacity Building in Africa.
- USAID/Ethiopia (2010). Ethiopian Early Grade Reading Assessment: Data analytic report Language and Early Learning. Addis Ababa. Retrieved from <https://www.usaid.gov/sites/default/files/documents/1860/Ethiopia%20Early....pdf>
- USAID/IQPEP (2012). School Improvement Program (SIP): Its implementation, challenges and policy implications (Monitoring, evaluation, research and analysis report). Addis Ababa.
- Wald, P. J., & Castleberry, M. S. (2000). *Creating a professional learning community in your school: Educators as learners*. Alexandria: Association for Supervision and Curriculum Development.
- Waldron, N. L., & McLeskey, J. (2010). Establishing a collaborative school culture through comprehensive school reform. *Journal of Educational and Psychological Consultation*, 20, 58-74. doi: 10.1080/10474410903535364

- West, M., Jackson, D., Harris, A., & Hopkins, D. (2000). Learning through leadership: Leadership for sustained school improvement. In K.A. Riley, & K. S. Louis (Eds.), *Leadership for change and school reform: International perspectives* (pp. 30-49). London: RoutledgeFalmer.
- Williams, R. B., Brien, K., & LeBlank, J. (2012). Transforming schools into learning organizations: Supports and barriers to educational reform. *Canadian Journal of Educational Administration and Policy*, Issue #134.
- Willms, J. D. (2003). *Student engagement at school: A Sense of belonging and participation: Results from the OECD Programme for International Student Assessment (PISA) 2000*. Paris: Organization for Economic Co-Operation and Development
- World Bank (2005), *Education in Ethiopia: Strengthening the foundation for sustainable progress*. The World Bank: Washington, D.C. doi: [10.1596/978-0-8213-6226-6](https://doi.org/10.1596/978-0-8213-6226-6)
- World Bank (2013). International Development Association Project Appraisal Document on a Proposed Credit (Report No. PAD476). Ethiopia General Education Quality Improvement Project II (P129828).
- Xaba, M. (2006). The difficulties of school development planning, *South African Journal of Education*, 26(1), 15–26.
- Yazzie-Mintz, E. (2009). Charting the path from engagement to achievement: A report on the 2009 High School Survey of Student Engagement. Retrieved from <http://ceep.indiana.edu/hssse>
- Zbar, V. Marshall, G., & Power, P. (2007). *Better schools, better teachers, better results: A handbook for improved performance management in your school*. Australia: ACER Press.

APPENDICES

Appendix A

Addis Ababa University, College of Education and Behavioral Studies

Department of Educational Planning and Management

Questionnaire to Teachers

This questionnaire is designed to collect data from teachers for a research entitled “Internal Capacity of Model Secondary Schools of Oromia National Regional State”. The purpose of the research is to explore the state of affairs regarding the “Internal capacity of model secondary schools of the region to ensure sustainable school improvement.” In doing so, the study attempts to identify problems and challenges facing the schools to ensure sustainable school improvement. To achieve the purpose of this research, your cooperation and honest response to the question items of the questionnaire is very essential. Your responses will be kept confidential and used only for academic purpose in an Ethical manner.

Thank you in advance for your cooperation!

Sincerely!

Begashaw Mamuye, Ph.D student at Addis Ababa University

- Phone: 0911-xx-yy-zz, for personal contact.

Instruction

The questionnaire has two parts: part-I and part-II. Respond to the question items in both parts of the questionnaire by **circling your appropriate response** from among the alternative choices, or rating scales. For anonymity purpose, you are not required to write your name on the questionnaire.

Part-I: Demographic Data of the Respondent

Please, circle the letter of your response to the item.

1. Your Sex: A. Male B. Female
2. Your Age: A. 20 25 B. 26 30 C. 31—35 D. 36 40 E. Above 40 years
3. Academic Qualification: A. Diploma B. BA/BSc C. MA/MSc D. Other -----
4. Total years of teaching service: A. 1-2 B. 3-5 C. 6-9 D 10-15 E. above 15 years
5. Total teaching service in this school: A. 1-2 B. 3-5 C. 6-9 D. 10-15 E. above 15 years
6. Career status: A. Beginner teacher B. Junior teacher C. Teacher D. Higher teacher E. Associate lead teacher F. Lead teacher G. Higher lead teacher

Part II: Data for Analysis and Interpretation

Data for analysis and interpretation have three parts: **Part A** contains question items regarding the extent to which the *professional staff* (i.e., *academic staff*) of your school works as collaborative, learning community of shared responsibility. **Part B** contains question items regarding the *leadership practices of your school principal*; and **part C** contains a few items about the *sprit and practice of teacher shared leadership (collegial leadership)* in your school.

Accordingly, please indicate the extent of your agreement or disagreement to question items in each part of the questionnaire in the following table using five-point Likert scale as:

Strongly Agree (SA) = 5; Agree (A) = 4; Undecided (U) = 3; Disagree (D) = 2; Strongly Disagree (SD) = 1.

No	Part A: Professional staff (Academic Staff) as collaborative learning community	Rating Scale				
		5	4	3	2	1
1	School improvement vision of the school had been discussed by the staff and a sense shared vision has developed	SA	A	U	D	SD
2	The vision of the school focuses on improving student learning and learning outcome.	SA	A	U	D	SD
3	School improvement “values” of the school had been discussed by the staff and shared values have developed	SA	A	U	D	SD
4	The values of the school focus on improving student learning and learning outcomes	SA	A	U	D	SD
5	Decisions in this school are made in line with the school’s shared vision and values.	SA	A	U	D	SD
6	It is the shared values of the school that govern teachers’ norms (behaviors) in this school.	SA	A	U	D	SD
7	The staff plans and works together to address diverse needs of students.	SA	A	U	D	SD
8	The staff collaboratively reviews instructional practices in order to improve student learning outcome	SA	A	U	D	SD
9	A sense of collective responsibility exists among staff for improving student learning outcome.	SA	A	U	D	SD
10	Disagreements (on ideas, processes, actions, and practices) in this school are resolved through discussion	SA	A	U	D	SD
11	The staff works together to seek knowledge, skills, and strategies that help	SA	A	U	D	SD

	to improve student learning outcome.					
12	The staff engages in dialogue that reflects the respect for diverse ideas for improving student learning and learning outcome	SA	A	U	D	SD
13	In this school a variety of structural arrangements have been established for collective/team learning through open dialogue/discussion.	SA	A	U	D	SD
14	Staff members collectively analyze and reflect on the teaching learning process with the aim of to bring improvement in student learning and learning outcome	SA	A	U	D	SD
15	Teachers in this school are engaged in action research to solve practical problems in the teaching-learning process	SA	A	U	D	SD
16	The results of action research presented to colleagues (for reflection, sharing experiences and Knowledge)	SA	A	U	D	SD
17	In this school, mentoring practices exist to share experiences	SA	A	U	D	SD
18	In this school, opportunities exist for senior staff members to observe instructional practices of junior colleagues	SA	A	U	D	SD
19	The senior staff provides feedback to colleagues on classroom instructional practice	SA	A	U	D	SD
20	Teachers as colleagues informally share personal experiences on how to improve student learning and learning outcome	SA	A	U	D	SD
21	Teachers in this school have been engaging in school-based continuous professional development (CPD) practice	SA	A	U	D	SD
22	Teachers in this school likes (happy about) school level CPD practice	SA	A	U	D	SD
23	There have been short-term CPD trainings offered to teachers by District Education Office (at school or cluster school level)	SA	A	U	D	SD
24	Short-term CPD trainings being offered to teachers focus on improving the professional skills of teachers	SA	A	U	D	SD
25	Teachers like (happy about) the short-term CPD trainings offered by District Education Office	SA	A	U	D	SD
26	Positive collegial relationship based on trust and respect exists between school principal and teachers	SA	A	U	D	SD
27	Positive collegial relationship based on trust and respect exists among teachers	SA	A	U	D	SD
28	The school principal promotes positive relationship among the staff	SA	A	U	D	SD

29	Time is available to facilitate collaborative work by the staff	SA	A	U	D	SD
30	Staff meets regularly to discuss on substantive school improvement issues	SA	A	U	D	SD
31	Opportunities exist to share experience from other schools	SA	A	U	D	SD
32	School supervisor of District Education Office provides expertise support to teachers' school-based CPD practice	SA	A	U	D	SD
Part B: Leadership Practices of your school Principal		Rating Scale				
		5	4	3	2	1
1	He/she communicate the improvement vision of school to staff and students, parents and the community	SA	A	U	D	SD
2	He/she works toward building a sense of shared vision among staff, students, and parents	SA	A	U	D	SD
3	He/she works effectively with all staff, students and parents to foster shared understandings	SA	A	U	D	SD
4	He/she clarifies the mission of school to the staff in terms of the social purposes/goals of school	SA	A	U	D	SD
5	He/she involve staff in setting school improvement goals and targets	SA	A	U	D	SD
6	Communicates the school improvement goals to staff and students in terms of: specific objectives and targets	SA	A	U	D	SD
7	Put high expectation on teachers to work hard for achieving goals and targets of school improvement	SA	A	U	D	SD
8	Put high expectations on students for better academic achievement	SA	A	U	D	SD
9	Often espouses norms of excellence and quality of performance of the staff	SA	A	U	D	SD
10	Understands that each teacher is an individual having unique needs, abilities, and emotions	SA	A	U	D	SD
11	know each individual teacher well enough to understand his/her problems and interests	SA	A	U	D	SD
12	Empathetic to personal problems and emotions of a teacher	SA	A	U	D	SD
13	Provides guidance to a needy individual teacher on how to implement new initiatives for school improvement	SA	A	U	D	SD
14	Provides guidance to teacher work teams/groups of teachers at departments on how to implement school improvement reforms	SA	A	U	D	SD
15	Provides support (e.g., guidance, material resources) to teacher	SA	A	U	D	SD

	management team/groups to carry out duties					
16	Facilitates school based professional learning by creating opportunities for colleagues to learn from each other	SA	A	U	D	SD
17	Encourages us for innovative ways of solving problems	SA	A	U	D	SD
18	Encourages us to evaluate our professional practices and refine them as needed.	SA	A	U	D	SD
19	Encourage us to learn new professional skills and abilities	SA	A	U	D	SD
20	Display energy and enthusiasm for the improvement of the school	SA	A	U	D	SD
21	Exemplary/models in his/her commitment to shared values of school improvement	SA	A	U	D	SD
22	Exemplary in his/her commitment to the achievement of school improvement goals	SA	A	U	D	SD
23	Established structure for participating senior teachers in the supervision of the teaching learning process	SA	A	U	D	SD
24	Established structure for participating teachers for the management and in the co-ordination of school-based CPD	SA	A	U	D	SD
25	Established structure for organizing teachers in a department/s into collaborative, learning groups/teams	SA	A	U	D	SD
26	Organized teachers in a respective departments into collaborative, learning work groups/teams	SA	A	U	D	SD
27	Encourages group planning of teachers to improve student learning outcome	SA	A	U	D	SD
28	Inspires teachers to work collaboratively in teams/groups for achieving school improvement goals and objectives	SA	A	U	D	SD
29	Provide the required support for teachers' collaborative work	SA	A	U	D	SD
30	Facilitates staff's collaborative work	SA	A	U	D	SD
31	Shows a respectful tone of interaction with staff members	SA	A	U	D	SD
32	Shows respect to the suggestions and comments of staff	SA	A	U	D	SD
33	Does not hurry to criticize before having valid information for fair judgment	SA	A	U	D	SD
34	Effective in establishing productive working relationship with the local community	SA	A	U	D	SD
35	Effective in ensuring community support for school improvement.	SA	A	U	D	SD

36	Effective in communicating and working with community representatives	SA	A	U	D	SD
37	Focus on the teaching-learning program and take proactive measures before things get wrong	SA	A	U	D	SD
38	Monitor teachers' performance toward achieving school goals and targets	SA	A	U	D	SD
39	Give adequate attention to improving the classroom teaching-learning process	SA	A	U	D	SD
40	Regularly supervise the classroom teaching-learning process.	SA	A	U	D	SD
41	He/she allocates resources (manpower, financial, and material) in a way that promote effective teaching-learning program/process	SA	A	U	D	SD
The Sprit and Practice of Shared Leadership (Especially Shared Leadership of Teachers)						
1	The school principal involves teachers in relevant decision-making	SA	A	U	D	SD
2	The school principal uses delegation of tasks to teachers (e.g., teams, committee, task force group, etc)	SA	A	U	D	SD
3	The school principal encourages shared leadership of school	SA	A	U	D	SD
4	Teachers have a strong sense of shared responsibility in the leadership of the school	SA	A	U	D	SD
5	Teachers are actively involved in sharing the leadership of the school	SA	A	U	D	SD
6	Students have a strong sense of shared responsibility in the leadership of the school	SA	A	U	D	SD
7	Student representatives are actively involved in managing student behavior	SA	A	U	D	SD

Thank you very much!

Appendix B

Addis Ababa University, College of Education and Behavioral Studies

Department of Educational Planning and Management

Questionnaire for School principals and Department Heads

The questionnaire is designed to collect data from school principals and department heads for a research entitled “Internal Capacity of Model Secondary Schools of Oromia National Regional State”. The purpose of the research is to explore the state of affairs regarding the internal capacity of model secondary schools to ensure sustainable improvement; In doing so, the study also tries to identify challenges/problems facing the schools to ensure sustainable improvement and suggests viable solution to the problems/challenges. To achieve the purpose of this research your cooperation and honest response to the question items of the questionnaire is very essential. The researcher would like to assure you that your responses will be kept confidential and used only for academic purpose in an Ethical manner.

Sincerely!

Begashaw Mamuye, Ph.D student at Addis Ababa University

- Phone: 0911-xx-yy-zz, for personal contact.

Instruction

Respond to all question items in the questionnaire by *circling the letter* or the *rating scale* that would best represent your appropriate response. You are not required to write your name on the questionnaire.

Part-I: Demographic Data of the Despondent:

Please, circle the letter of your appropriate response.

1. Your School _____
2. Your Sex: A. Male B. Female
3. Your Age: A. 20 –25 B. 26 –30 C. 31—35 D. 36-40 E. Above 40 years
4. Academic Qualification: A. Diploma B. BA/BSc C. MA/MSc D. Other----
5. Total teaching service in year: A. 1-2 B. 3-5 C. 6-9 D 10-15 E. above 15 years
6. Service years in this school: A. 1-2 B. 3-5 C. 6-9 D 10-15 E. above 15 years
7. Your current Position: A. Principal: B. Vice principal C. Department Head
8. Service years: in your current poison (as principal or dep’t head):
A. 1 year. B. 2-3 years. C. 4-5 years. D. above 5 years

Part-II: Data for Analysis and Interpretation

Data for analysis and interpretation focuses five areas of school capacity to ensure sustainable school improvement: (a) **Strategic Planning Capacity**; (b) **Empowerment and engagement of Parents, especially PTA**; (c) **Human resource capacity**, especially the adequacy and quality of teaching staff; (d) **Shared Collegial leadership Sprit/practices**; and (e) **Financial Source Capacity**

With these five areas of school capacity in mind, please indicate the extent of your agreement or disagreement to each of the items in the following table using a five point Likert scale as: *Strongly Agree (SA) = 5; Agree (A) = 4; Undecided (U) = 3; Disagree (D) = 2; Strongly Disagree (SD) = 1*

No.	Strategic Planning Capacity of School	Rating Scale				
		5	4	3	2	1
1	The school has capacity to prepare school improvement plan, which is specific, measurable and relevant	SA	A	U	D	SD
2	The school has the capacity to conduct self-evaluation (i.e., the capacity to collect relevant data, to analyze and to interpret the data)	SA	A	U	D	SD
3	The school has the capacity to make priority objectives and targets for school improvement planning	SA	A	U	D	SD
4	The school organizes student achievement scores in a finer summary format	SA	A	U	D	SD
5	The school makes honest monitoring and evaluation of the implementation of school improvement plan	SA	A	U	D	SD
6	The school has an established system for monitoring and evaluating the implementation of school improvement plan	SA	A	U	D	SD
Empowerment and Engagement of Parents and the community						
7	PTA works with enthusiasm (interest) for the improvement of the school	SA	A	U	D	SD
8	PTA have active involvement in the leadership/management of the school	SA	A	U	D	SD
9	PTA have strong a sense of shared responsibility to ensure sustainable school improvement	SA	A	U	D	SD
10	Parents follow the learning of their child	SA	A	U	D	SD
11	Teachers are willing to communicate with parents about the child's learning/behavior in school	SA	A	U	D	SD

12	To the extent of their capability, the local community/parents are willing to support the school in cash, in kind, or in labor	SA	A	U	D	SD
13	The school persistently makes regular communication with parents/community	SA	A	U	D	SD
14	Parents have adequate interest to attend parent/community forums/programs of the school	SA	A	U	D	SD
Sprit and Practice of Shared Leadership						
17	The school principal involves teachers in relevant decision-making	SA	A	U	D	SD
18	The school principal uses delegation of tasks to teachers (e.g., teams/task group, committee, etc)	SA	A	U	D	SD
19	The school principal encourages shared leadership	SA	A	U	D	SD
20	Teachers have strong sense of shared responsibility in the leadership of the school	SA	A	U	D	SD
21	Teachers are actively involved in sharing the leadership of the school	SA	A	U	D	SD
22	Students have strong sense of shared responsibility in the leadership of the school	SA	A	U	D	SD
23	Student representatives are actively involved in managing student behavior	SA	A	U	D	SD
Adequacy, quality (competency) and commitment of Teachers						
24	All teachers in this school are qualified to teach at secondary school level (i.e., at least BA or BSc degree graduates)	SA	A	U	D	SD
25	Teachers in this school have adequate knowledge in the subject area they teach	SA	A	U	D	SD
26	Teachers in this school have adequate pedagogical competence for effective teaching	SA	A	U	D	SD
27	Teachers have the ability (knowledge and skill) to evaluate the curriculum in their subject area	SA	A	U	D	SD
28	Teachers have the ability to produce supplementary teaching materials in their subject area	SA	A	U	D	SD
29	Teachers have the ability to conduct action research to solve practical problems in the teaching-learning process	SA	A	U	D	SD
30	Teachers have the ability to use different active teaching methods	SA	A	U	D	SD
31	Teachers in this school work with fairly high professional commitment	SA	A	U	D	SD

	to ensure sustainable school improvement					
32	Teachers in this school work with fairly high morale to realize the objectives and targets of school improvement plan	SA	A	U	D	SD
33	Teachers work with fairly high energy to realize the objectives and targets of school improvement plan	SA	A	U	D	SD
Financial Source Capacity of the school						
34	The government provide the school with adequate financial support/budget	SA	A	U	D	SD
35	The local community/parents have good economic capacity to support the school in cash	SA	A	U	D	SD
36	The school have good income generation capacity from within-school sources (e.g., by renting/contracting, and other sources)	SA	A	U	D	SD

Thank you very much!

Appendix C

Addis Ababa University, College of Education and Behavioral Studies

Department of Educational Planning and Management

Questionnaire for Students

This is a questionnaire to collect data from students for a research. The purpose of the research is to explore the state of affairs regarding the “Internal Capacity of Model Secondary Schools of Oromia Regional State.” In doing so, the study tries to identify challenges and problems facing the schools, and suggests viable solution to the problems/challenges. To achieve the purpose of this research, you are, therefore kindly requested to respond honestly to question items in the questionnaire.

Thank you in advance for your cooperation!

Sincerely!

Begashaw Mamuye, Ph.D student at Addis Ababa University

Instruction

Respond to all question items of the questionnaire by circling the letter or rating scale of your appropriate responses. You are not required to write your name on the questionnaire

Part-I: Demographic Data

Please, respond by circling the letter of your appropriate response.

1. School _____
2. Your Sex: A. Male B. Female
3. Your Grade: A. 9th grade B. 10th grade
4. Your Age: A. 15 B. 16 C. 17 D. 18 E. Above 18 years

Part-II: Data for Analysis and Interpretation

Question items in the following table are intended to *collect data on student empowerment and student engagement* as a result of school improvement efforts made by your school.

Part-I of the table is about student empowerment; *Part II* is about student engagement and *Part III* is about physical and material facilities affecting student learning. Accordingly, please, indicate the extent of your agreement or disagreement to each item in part-I and part-

II, and part III of the questionnaire in the table below using five-point Likert scale as:

Strongly Agree (SA) = 5; Agree (A) = 4; Undecided (U) = 3; Disagree (D) = 2; Strongly Disagree (SD)

No	Part I: Student Empowerment	Rating Scale				
		5	4	3	2	1
1	The school involves students in school leadership/management affairs	SA	A	U	D	SD
2	The school seeks for student opinion for school improvement planning	SA	A	U	D	SD
3	Student council (student parliament) is actively involved in school decision-making important to students	SA	A	U	D	SD
4	Student council (student parliament) actively presents student voices to school leadership/management	SA	A	U	D	SD
5	Student in this school respect their teachers	SA	A	U	D	SD
6	Students in this school do what their teachers ordered them to do (e.g., individual and group works)	SA	A	U	D	SD
7	Students in this school respect the rules and regulations of the school	SA	A	U	D	SD
8	Students in your class show disciplinary classroom behaviors	SA	A	U	D	SD
9	Students in this school take the responsibility for controlling their behavior	SA	A	U	D	SD
10	Students in this school respect and help each other in “1-in-5” learning group (i.e., in “Raayyaa barnootaa”)	SA	A	U	D	SD
11	Students in this school take responsibility for their individual learning (e.g., doing assignments, home works, and to study)	SA	A	U	D	SD
12	Students in this school take responsibility for their learning into “1-in-5” learning group (i.e., in “Raayyaa barnootaa”)	SA	A	U	D	SD
Part II: Student Engagement		Rating Scale				
		5	4	3	2	1
A). Behavioral Engagement (Participation and Relationships)						
1	The school encourage students to participate in extra-curricular activities (i.e., different clubs in school)	SA	A	U	D	SD
2	Extra-curricular clubs in your school are well functioning	SA	A	U	D	SD
3	Students of this school actively participate in extra-curricular activities	SA	A	U	D	SD
4	In this school, female students are free from harassment by male students	SA	A	U	D	SD
5	In this school, student respect diversity among student population	SA	A	U	D	SD
6	In this school, teachers understand their students and treat them positively	SA	A	U	D	SD

7	In this school, positive relationship exist between teachers and students	SA	A	U	D	SD
B). Academic Engagement						
8	your teachers use a variety of active-learning methods	SA	A	U	D	SD
9	your teachers use a variety of individual and group work strategies of teaching	SA	A	U	D	SD
10	Your teachers follow the learning and understanding of each student in a classroom teaching-learning process	SA	A	U	D	SD
11	Your teachers are good at controlling student misbehavior in a classroom	SA	A	U	D	SD
12	You pay attention to understand when the teacher teaches	SA	A	U	D	SD
13	You have active involvement in group discussions in classroom	SA	A	U	D	SD
14	You have active involvement in asking and answering questions in classroom learning	SA	A	U	D	SD
15	You feel free to ask and answer question in classroom learning	SA	A	U	D	SD
16	Your teachers encourage the active involvement of each student in classroom teaching-learning process	SA	A	U	D	SD
17	Teachers in this school are well committed to the provision of guidance to the learning of students into “1-in-5” learning group (i.e., in “Raayyaa barnootaa”)	SA	A	U	D	SD
18	Teachers are well committed to the follow up of the learning of students in “1-in-5” learning group (i.e., in “Raayyaa barnootaa”)	SA	A	U	D	SD
19	Studying into “1-in-5” learning group has helped you to understand the subject matter and improve your test scores	SA	A	U	D	SD
21	You like learning in “1-in-5” learning group (“Raayyaa barnootaa”)	SA	A	U	D	SD
27	Your teachers have the ability (knowledge) in the subject area they teach	SA	A	U	D	SD
28	Your teachers have the ability to explain new concepts in the lesson as easily as possible	SA	A	U	D	SD
29	Your teachers have the ability to explain new concepts in the lesson by taking clear examples	SA	A	U	D	SD
30	Your teachers have high expectation on students to work hard for high academic achievement	SA	A	U	D	SD
31	Your teachers support academically “low achieving: students so as to	SA	A	U	D	SD

	enable them improve academic achievement of these students					
32	Teachers of this school give special support to needy female students so as to enable them improve their academic achievement	SA	A	U	D	SD
C). Affective engagement (identification/belongingness)						
33	You appreciate the efforts of teachers in this school to enable students understand the subject matter they teach	SA	A	U	D	SD
34	The effort of this school to improve student learning and academic achievement is appreciable	SA	A	U	D	SD
35	The orderly (disciplinary) climate in this school is appreciable	SA	A	U	D	SD
Part III). Availability Physical Facilities and Materials Affecting Student Learning						
1	The school provides students a satisfactory laboratory for experimentation	SA	A	U	D	SD
2	The school provides students adequate references books in the library	SA	A	U	D	SD
3	The school provides students a satisfactory library service	SA	A	U	D	SD
4	The school provides students with satisfactory toilet facility for boys and girls	SA	A	U	D	SD
5	Each student in this school has text book for each subject	SA	A	U	D	SD

Thank you very much!

Appendix D

Interview Guide to Teachers

The interview focuses on four broad issues designated as part-I, part-II, part-III, and part-IV. You are kindly requested to respond to the interview questions in each of the four broad issues. **Part-I: Leadership practices and behaviors for sustainable school improvement**

1. From your personal point of view (perspective), what are **leadership practices** and **behaviors** of effective school principal to ensure sustainable (continuous) school improvement? How do you describe your school principal in this regard?
2. What is your perception/observation about the leadership practices and behaviors of your school principal in relation to the following points:
 - 2.1. In setting vision, mission, goal, and communicating them to stakeholders
 - 2.2. In facilitating and monitoring the teaching learning process, including classroom instruction?
 - 2.3. In building collaborative culture among school community
 - 2.4. In people oriented behavior
 - 2.5. In focusing on task performance
 - 2.6. Creating and maintaining school-parent- community relationships and resource mobilization?
 - 2.7. What is the commitment of your school principal (for instance, demonstrating morale, devotion/modeling, or playing exemplary role practices/behaviors)?
 - 2.8. What is the spirit and practices of shared teacher leadership in this school?

Part-II: Professional Learning Community of Teachers

1. What are the vision, mission, and core values of school? And how do you describe the extent to which teachers in your school share the vision, mission, core values, and goals of the school? Why?
2. What is the collaborative culture of teachers in this school (e.g., collaboratively work for school improvement, sense of team spirit, collective responsibility, and shared leadership)?
3. How is the collaborative learning of teachers in this school (e.g., share experience, plan together, discuss together how to improve student learning), How does your school principal encourage such collaborative learning?
4. How do you describe the social relationship among teachers, and between teachers and school principal in this school? Is positive relationship or negative relationship?
5. What structures (opportunities) exist for collaborative learning of teachers?

6. How do you describe school-based CPD practices of teachers?
7. What is the commitment (morale, motivation, devotion) of teachers for ensuring sustainable school improvement (i.e., improving student learning and learning outcome)?

Part-III: The Empowerment of Students

1. How do you describe students' motivation to learn?
2. How do you describe student empowerment (a) in taking the responsibility to improve their learning? (b) in respecting the rules and regulations of the school in classroom and outside the classroom?

Part-IV: Important elements of school capacity to ensure sustainable (continuous) school improvement and the major problems and challenges

1. What, do you think, are the important elements/aspects of school capacity to ensure sustainable (continuous) school improvement? Are there capacity gaps of this school to ensure sustainable (continuous) school improvement?
2. What are the major problems and challenges of your school to ensure sustainable (continuous) school improvement and developing (building) the internal capacity of school?

Appendix E

Interview Guide to School Principals

The interview focuses on four broad issues designated as part-I, part-II, part-III, and part-IV. You are kindly requested to respond to the interview questions. I would like to assure you my ethical concern and commitment in keeping the anonymity and confidentiality of your responses.

Part-I: Continuous Improvement Planning Capacity and Resource Capacity

1. What is the capacity of the school to prepare clear, measurable strategic and operational plan?
2. What is the monitoring and evaluation capacity of the school for the implementation the plan?
3. What is the resource capacity of your school (financial, human, and facilities/materials) for sustainable (continuous) school improvement?

Part-II: Professional Learning Community of Teachers

1. What are the vision, mission, and core values of your school? And how do you describe the extent to which teachers in your school share the vision, mission, core values, and goals of the school? Why?
2. How do you describe the collaborative culture of teachers in this school (e.g., collaboratively work for school improvement, sense of team spirit, collective responsibility, and shared leadership)?
3. How do you describe the collaborative learning of teachers in this school (e.g., share experience, plan together, discuss together how to improve student learning), How does the school principal encourage such collaborative learning?
4. How do you describe the social relationship among teachers and between teachers and school principal in your school?
5. What structures (opportunities) exist for collaborative learning of teachers (shared personal practice)?
6. What do you describe school-based CPD practices in this school?
7. What is the commitment (morale, motivation, devotion) of teachers for ensuring sustainable school improvement (i.e., improving student learning and learning outcome)?

Part-III: The Empowerment of Students and Parents

1. What is the commitment of PTA in helping school improvement efforts of school?
2. What is the empowerment of students to ensure sustainable school improvement? For instance, their motivation to learn; taking responsibility to improve their academic achievement; respect rules and regulations of school?
3. What structures exist for student involvement in school management/leadership affairs?

Part-IV: Important elements of school capacity to ensure sustainable (continuous) school improvement and the major problems and challenges

1. From your personal point of view, what do you think are the important elements/aspects of school capacity to ensure sustainable (continuous) school improvement? **Are there capacity gaps** of this school to ensure sustainable (continuous) school improvement?
2. What are the major problems and challenges of your school to ensure sustainable (continuous) school improvement and developing (building) the internal capacity of school?

Appendix F

I. Interview Guide to Supervisors

You are kindly requested to respond to the following interview questions. As I already informed you, I would like to assure you my ethical concern and commitment in keeping the anonymity and confidentiality of your responses.

1. What is the capacity of the school to prepare evidence-based, clear and measurable strategic school improvement plan? And what processes are involved?
2. What is the monitoring and evaluation capacity of the school for the implementation the plan (i.e., the mechanisms/way and capacity of monitoring, data collection, data organization and evaluation)?
3. What is the resource capacity of your school (financial, human, and facilities/materials) for sustainable (continuous) school improvement?
4. How do you describe school-based continuous professional development opportunities and practices in this school?
5. What is the commitment (morale, motivation, devotion) of teachers for ensuring sustainable school improvement (i.e., improving student learning and learning outcome)?
6. What are the major problems and challenges of the school to ensure sustainable (continuous) school improvement and developing (building) the internal capacity of school?

II. Interview Guide to PTA members

1. To what extent PTA members are playing their role for the improvement of the school?
2. What measure roles do the PTA has been playing for school improvement?
3. What is the commitment of PTA for sustainable improvement of this school?
4. What is the commitment of parents and the community in supporting school improvement efforts of the school? What major roles PTA is doing? The achievements?
5. What are the major challenges of PTA to execute their duties?
6. What is the commitment (morale, motivation, devotion) of teachers for ensuring sustainable school improvement (i.e., improving student learning and learning outcome).

Appendix-G

Student FGDs Guide

Each of you are kindly requested to give your opinion to the following group discussion questions. I would like to assure you my ethical concern and commitment in keeping the anonymity and confidentiality of your responses/opinion.

1. The school involves students in school improvement efforts;
2. The school takes students' opinion regarding the improvement of school: what to improve? How to involve students etc.
3. What is empowerment of students to ensure sustainable school improvement?
 - motivation to learn,
 - taking responsibility to improve their achievement,
 - respect rules and regulations of school
4. What is teacher-students' relationship?
 - Teachers support students
 - Students respect teachers
 - Teachers have high expectations on students to achieve
5. How do you describe your teachers' ability (professional knowledge and skill) to teach you?
6. What are the special features of your school for better student learning?
7. What is the availability and adequacy of facilities (e.g., water, toilet, laboratory, library, service, etc) in this school?

Appendix-H

Observation Guide for School Facilities

School Code _____

School Physical Facilities	Availability (Yes, No)	Observation note about availability, adequacy, quality, and status of service
I. Availability and Quality Facilities and Services for Teaching Learning process		
<ul style="list-style-type: none"> • The availability and adequacy of library service (well furnished, enough space, well functioning, adequate references) 		
<ul style="list-style-type: none"> • The availability and quality of laboratory service (enough room, well furnished, availability of equipments/apparatuses, chemicals) 		
<ul style="list-style-type: none"> • The availability and quality of pedagogical center 		
<ul style="list-style-type: none"> • The availability of ICT services (adequate computers, well functioning) 		
II. Availability and Adequacy of School Facilities for Students		
<ul style="list-style-type: none"> • The availability and quality of separate toilets for boys and girls (clean, watered) 		
<ul style="list-style-type: none"> • The availability of clean water (tape, well) 		
<ul style="list-style-type: none"> • The availability of ICT services (adequate computers, well functioning, internet service for teachers) 		
III. Availability and Adequacy of Staff Facilities		
<ul style="list-style-type: none"> • The availability and the quality of staffroom and services 		
<ul style="list-style-type: none"> • The availability and the quality of staff lounge (tearoom) and services 		
IV. The Availability of Administrative facilities		
<ul style="list-style-type: none"> • Offices for school principals, • Offices for Dep'ts & PTA • Printing and duplication machines 		
V. Conditions of school compound (status)		
<ul style="list-style-type: none"> • Beautification and cleanness • Artifacts • Sport fields • Garden trees 		

Appendix-I

Document Analysis Guide

Documents: School Improvement Planning Strategic Planning & Annual (Yearly) Plan

School Code: _____

1. How well do the strategic plan is Comprehensive, Concise, and contents are presented in Logical order			
Major Thematic Areas	Specific Area/aspects of analysis	Status (very good, good, fairly good, poor, very poor) and qualitative description of the status	
Comprehensiveness (Contains major contents of good Plan)	Introduction		
	Self-evaluation		
	SWOT Analysis		
	Priority setting		
	Action Plan		
logical order of contents	The contents are presented in logical coherence		
	Satisfactory coherent flow of ideas		
Conciseness	Brief presentation of contents as opposed to too overloaded claims, wordings, and/or phrases	,	
	Clear presentation of self-evaluation data, Clear analysis, Clear		
2. How well the school improvement strategic plans are evidence-based			
Evidence-based priority goals and objectives	Priority goals/objectives based on honest school self-evaluation		
	Self-evaluation based on honest and comprehensive data		
	Identification of SWOT based on comprehensive data		
	setting priority goals, & objectives based on SWOT		
Involvement of the stakeholders in school self-	Self-evaluation involves the four domains of SIP and student achievement data		
	Clearly understandable analysis of		

evaluation, and planning	quantitative data and qualitative data (interview, or discussions with stakeholders)		
	Clear quantitative and qualitative evidences for the involvement of key stakeholders in self-evaluation, and planning		
3. How well school Improvement strategic Plan are SMART			
Goals, Objectives and targets	Specific		
	Measurable		
	Achievable		
	Relevant		
	Time-bound		
Action plan for achieving objectives/targets	Involved specific strategic actions/activities and relevant indicators of practice and success		
	Actions/activities schedule, implementing bodies indicated		
	Budget and budget source indicated		
	Monitoring and Evaluation System/Mechanism indicated		
4. How well the school improvement yearly (annual) operational plans are SMART.			
Objectives	Specific, measurable, achievable, derived from strategic plan		
Action Plans	Indicate actions/activities, activity schedules, indicators of practice, and monitoring mechanism		
	Implementing body and budget indicated		
	Monitoring and evaluation system/method indicated.		

Appendix J

Table J: Pattern and Structure Matrix for Five Component Solution of EPFA of PLC Scale Using Direct Oblimin Rotation

Scale Items	Pattern Matrix					Structure Matrix					Communalities	
	Components					Component					Initial Eigen value	Extraction
	1	2	3	4	5	1	2	3	4	5		
PLC-Q4	.836					.824		-.301	-.318		1.000	.686
PLC-Q2	.736					.745			-.340	.318	1.000	.583
PLC-Q3	.664					.750	.387	-.444	-.302	.348	1.000	.630
PLC-Q1	.590					.708	.391	-.446	-.438		1.000	.597
PLC-Q7	.555					.648		-.385		.479	1.000	.514
PLC-Q5	.554					.655	.404	-.355	-.386		1.000	.500
PLC-Q9	.445					.615		-.482	-.413	.456	1.000	.541
PLC-Q8	.433				.327	.603		-.432	-.374	.527	1.000	.502
PLC-Q6	.404					.583		-.441	-.462	.374	1.000	.448
PLC-Q23		.884					.860				1.000	.750
PLC-Q24		.845				.853	-.347	-.301	.322		1.000	.748
PLC-Q25		.727				.333	.819	-.320	-.431	.425	1.000	.709
PLC-Q22		.679					.754		-.447	.310	1.000	.605
PLC-Q21		.504				.353	.602		-.449		1.000	.606
PLC-Q31		.481		-.343		.654	-.309	-.546	.472		1.000	.453
PLC-Q32		.414	-.315				.606	-.523	-.490	.460	1.000	.559
PLC-Q13			-.929			.401		-.909	-.407	.338	1.000	.796
PLC-Q12			-.882			.401		-.909	-.407	.338	1.000	.837
PLC-Q14			-.719					-.753		.423	1.000	.597
PLC-Q11			-.593			.492		-.733	-.414	.398	1.000	.601
PLC-Q28				-.777		.389		-.373	-.793		1.000	.668
PLC-Q27				-.664		.503	.348	-.407	-.780	.335	1.000	.666
PLC-Q30				-.649			.400		-.705	.376	1.000	.538
PLC-Q29				-.635		.318	.373	-.337	-.717	.344	1.000	.534
PLC-Q26				-.633		.375	.456		-.745	.375	1.000	.601
PLC-Q10				-.398		.490		-.488	-.574	.351	1.000	.473
PLC-16					.685					.666	1.000	.458
PLC-Q18					.624	.324	.386	-.330	-.425	.721	1.000	.565
PLC-Q15					.580	.422	.504	-.446		.735	1.000	.654
PLC-Q19					.551	.391	.361	-.320	-.500	.678	1.000	.555
PLC-Q17					.507		.385	-.460	-.514	.673	1.000	.568
PLC-Q20				-.312	.382			-.466	-.500	.558	1.000	.456

Note. The components are bolded; KMO Measure of Sampling Adequacy = .925; Bartlett's Test of Sphericity = .000, Rotation = Oblimin Rotation.

Appendix-K

Table K1: Component Matrix of One Component Solution of EPFA for Strategic Planning Scale

Component Matrix		Communalities		KMO Measure of Sampling Adequacy.	Bartlett's Test of Sphericity
	Component	Initial Eigen Value	Extraction		
	1			.807	.000
Strategic PC-Q5	.819	1.000	.671		
Strategic PC-Q6	.779	1.000	.607		
Strategic PC-Q3	.746	1.000	.556		
Strategic PC-Q2	.716	1.000	.512		
Strategic PC-Q1	.701	1.000	.491		
Strategic PC-Q4	.592	1.000	.351		

Table K2: Component Matrix of One Component Solution of EPFA for Direction Setting of School Principal Leadership Practice

Leadership Dimension	Component Matrix		Communalities		KMO Test of Sample Adequacy	Bartlett's Test of Sphericity
	Items	Component	Initial Eigen Value Initial	Extraction		
Setting Direction	LP-Q5	.822	1.000	.676	.924	.000
	LP-Q4	.819	1.000	.670		
	LP-Q6	.813	1.000	.660		
	LP-Q3	.801	1.000	.642		
	LP-Q2	.789	1.000	.622		
	LP-Q8	.768	1.000	.590		
	LP-Q9	.768	1.000	.590		
	LP-Q7	.766	1.000	.587		
LP-Q1	.737	1.000	.544			

Table K3: Pattern and Structure Matrix of Two Component Solution of EPFA for Developing People Dimension of School Principal Leadership Practice

Items	Pattern Coefficient		Structure Coefficient		Communalities		KMO Test Sample Adequacy	Bartlett's Test of Sphericity
	Component 1	Component 2	Component 1	Component 2	Initial Eigen Value	Extraction		
LP-Q12	.934		.839	.517	1.000	.714	.920	.000
LP-Q13	.891		.839	.549	1.000	.707		
LP-Q14	.785		.836	.622	1.000	.702		
LP-Q10	.776		.816	.599	1.000	.667		
LP-Q11	.754		.810	.607	1.000	.660		
LP-Q15	.734		.776	.574	1.000	.605		
LP-Q16	.614		.749	.623	1.000	.581		
LP-Q21		.878	.598	.867	1.000	.752		
LP-Q19		.854	.585	.845	1.000	.752		
LP-Q20		.852	.581	.842	1.000	.715		
LP-Q18		.782	.560	.792	1.000	.709		
LP-Q22		.673	.601	.764	1.000	.593		

Note. The components are bolded. Rotation = Oblimin Rotation.

Appendix-L

Table L1: Pattern and Structure Matrix for Three Component Solution of EPFA of for Redesigning Organization Dimension of Leadership Practice Subscale

Pattern Coefficient			Structure Coefficient			Communalities		KMO Test of Sample Adequacy	Bartlett's Test of Sphericity	
Items	Components		Component			Initial	Extraction			
	1	2	3	1	2	3				
LP-Q31	.913			.859	.394	.519	1.000	.747	.891	.000
LP-Q30	.872			.852	.415	.425	1.000	.731		
LP-Q32	.770			.846	.435	.590	1.000	.736		
LP-Q29	.758			.807	.529	.430	1.000	.667		
LP-Q33	.582			.747	.457	.595	1.000	.605		
LP-Q28	.532			.713	.598	.458	1.000	.577		
LP-Q27	.416	.383		.643	.621	.428	1.000	.523		
LP-Q26		.910		.466	.890	.382	1.000	.794		
LP-Q25		.889		.417	.888	.415	1.000	.804		
LP-Q24		.849		.501	.869	.325	1.000	.761		
LP-Q23		.769		.544	.839	.367	1.000	.718		
LP-Q35			.933	.517	.329	.923	1.000	.855		
LP-Q36			.879	.505	.382	.889	1.000	.791		
LP-Q34			.807	.572	.455	.884	1.000	.796		

Note. The components are bolded. Rotation = Oblimin Rotation.

Table L2: Component Matrix of One Component Solution of EPFA for Managing the Teaching Learning Program Dimension

Component Matrix ^a					KMO Test of Sample Adequacy	Bartlett's Test of Sphericity
Items	Component					
	1	Initial Eigen value	Extraction			
LP-Q38	.876	1.000	.728	.849	.000	
LP-Q37	.853	1.000	.768			
LP-Q39	.829	1.000	.687			
LP-Q41	.764	1.000	.583			
LP-Q40	.713	1.000	.508			

Table L3: Component Matrix of One Component Solution of EPFA for the Practice of Shared Leadership

Component Matrix		Communalities		KMO's Test for Sample Adequacy	Bartlett's Test of Sphericity
	Component	Initial	Extraction		
	1				
ShLP-Q6	.811	1.000	.658	.885	.000
ShLP-Q2	.807	1.000	.652		
ShLP-Q5	.793	1.000	.629		
ShLP-Q4	.789	1.000	.658		
ShLP-Q7	.781	1.000	.610		
ShLP-Q8	.777	1.000	.603		
ShLP-Q1	.763	1.000	.583		

Appendix-M

EPFA for Student Empowerment Scale

Table M1: Pattern and Structure Matrix of Two Component solution of EPFA for Student Empowerment Scale							
Pattern Matrix		Structure Matrix		Communalities		KMO's Test for Sample Adequacy	Bartlett's Test of Sphericity
	Component		Component		Initial	Extraction	
	1	2	1	2			
StEmpt-Q6	.730		.659		1.000	.452	
StEmpt-Q7	.719		.724	.353	1.000	.524	
StEmpt-Q12	.631		.620		1.000	.385	
StEmpt-Q11	.613		.628	.323	1.000	.395	
StEmpt-Q10	.613		.615		1.000	.378	
StEmpt-Q8	.613		.623	.313	1.000	.389	
StEmpt-Q5	.524		.589	.387	1.000	.362	
StEmpt-Q9	.462		.541	.386	1.000	.314	
StEmpt-Q1		.733		.698	1.000	.491	
StEmpt-Q3		.681	.326	.682	1.000	.465	
StEmpt-Q4		.614	.328	.631	1.000	.399	
StEmpt-Q2		.581	.418	.649	1.000	.437	

Note. The components are bolded. Rotation = Oblimin Rotation.

Table M2: Component Matrix of One Component Solution of EPFA for Behavioral Engagement Dimension of Student Engagement					
Component Matrix		Communalities		KMO's Sampling Adequacy	Bartlett's Test of Sphericity
	Component				
	1	Initial	Extraction		
StEngmt-Q2	.683	1.000	.467	.790	.000
StEngmt-Q3	.664	1.000	.441		
StEngmt-Q7	.637	1.000	.405		
StEngmt-Q5	.627	1.000	.393		
StEngmt-Q6	.618	1.000	.382		
StEngmt-Q1	.570	1.000	.325		
StEngmt-Q4	.553	1.000	.305		

Appendix-N

	Pattern Coefficient		Structure Coefficient		Initial	Extraction	KMO's Sampling Adequacy	Bartlett's Test of Sphericity
	1	2	1	2				
StEngmt-Q32	.787		.708		1.000	.518	.913	.000
StEngmt-Q31	.783		.699		1.000	.507		
StEngmt-Q18	.660		.703	.427	1.000	.333		
StEngmt-Q28	.650		.640	.321	1.000	.409		
StEngmt-Q16	.635		.672	.404	1.000	.455		
StEngmt-Q30	.596		.585		1.000	.342		
StEngmt-Q29	.583		.663	.457	1.000	.456		
StEngmt-Q17	.580		.577		1.000	.333		
StEngmt-Q10	.563		.565	.300	1.000	.320		
StEngmt-Q9	.483		.562	.404	1.000	.332		
StEngmt-Q11	.475		.539	.372	1.000	.301		
StEngmt-Q27	.429		.586	.524	1.000	.408		
StEngmt-Q8	.389		.562	.404	1.000	.360		
StEngmt-Q12		.820		.745	1.000	.570		
StEngmt-Q13		.777	.539	.372	1.000	.574		
StEngmt-Q14		.647	.414	.686	1.000	.475		
StEngmt-Q19	.301	.423	.523	.581	1.000	.404		
StEngmt-Q15		.403	.436	.520	1.000	.307		

Note. The components are bolded. Rotation = Oblimin Rotation.

	Pattern Matrix		Structure Matrix		Communalities		KMO's Sampling Adequacy	Bartlett's Test of Sphericity		
	1	2	1	2						
Teacher competence Q3	.846		.849		1.000	.720	.679	.000		
Teacher competence Q2	.842		.785		1.000	.650				
Teacher competence Q4	.747		.735		1.000	.541				
Teacher competence Q5	.604		.678	.426	1.000	.514				
Teacher competence Q1	.442		.441		1.000	.194				
Teacher competence Q6	.424			.368	.534	.495			1.000	.409
Teacher commitment Q9				.921		.633			1.000	.786
Teacher commitment Q10				.858		.831			1.000	.698
Teacher commitment Q8				.598		.873			1.000	.414
Teacher commitment Q7		.325		.413	.448	.510			1.000	.356

Note. The components are bolded, Rotation = Oblimin Rotation.