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POST-1994 INSTRUCTIONAL **REFORMS** IN PRIMARY SCHOOLS
IN ETHIOPIA (1994-2024/25): ANALYZING SCHOOL-BASED
PROFESSIONAL LEARNING FROM CHANGE AND
ORGANIZATIONAL LEARNING PERSPECTIVES.

BY: ANIMAW TADESSE BAYIH

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Post-1994 instructional reforms in primary schools in Ethiopia (1994-2024/25): Analyzing school-based professional learning from change and organizational learning perspectives.

By: Animaw Tadesse Bayih

Addis Ababa University
College of Education and Language Studies
Department of Curriculum and Comparative Education

Advisor: Professor Ambissa Kenea

Co-Advisor: Dr. Kassahun W/Mariam (Gothenburg University, Sweden)

A Dissertation Submitted to the Graduate Studies of Addis Ababa University
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Doctor of Philosophy in Curriculum Studies.

Declaration

I hereby declare that this dissertation, submitted in partial fulfillment of the requirements for the Degree of Doctor of Philosophy in Curriculum Studies at Addis Ababa University, is my own original work. I confirm that the research and writing presented herein are the result of my personal investigation and effort, except where due acknowledgement has been made in the form of referencing. Furthermore, I affirm that this work, in its entirety or in part, has not been previously submitted for the award of any degree or qualification at this or any other university or institution of higher learning.

Addis Ababa University

College of Education and Language Studies

Department of Curriculum and Comparative Education

This is to confirm that the dissertation prepared by Animaw Tadesse entitled with ***Post-1994 instructional reforms in primary schools in Ethiopia (1994-2024/25): Analyzing school-based professional learning from change and organizational learning perspectives*** is submitted to the Graduate Studies of Addis Ababa University, College of Education and Language Studies, Department of Curriculum and Comparative Education in partial fulfillment of the requirements for the Degree of Doctor of Philosophy in Curriculum Studies compiles with regulation of the university and meets the accepted standards with respect to originality and quality.

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Advisor	Signature	Date
_____	_____	_____
Internal Examiner	Signature	Date
_____	_____	_____
External Examiner	Signature	Date

Contents

List of Figures and tables	iv
Abbreviations and Acronyms	v
Acknowledgements	vi
Abstract	vii
CHAPTER ONE	
INTRODUCTION	8
1.1 BACKGROUND OF THE STUDY	8
1.2 Statement of the problem	12
1.3 Objectives of the study	30
1.4 Scope of the Study	31
1.5 Significance of the Study	32
1.6 Operational definition of terms	33
1.7 Limitation of the study	33
1.8 Organization of the study	34
CHAPTER TWO	
REVIEW OF RELATED LITERATURE	36
Introduction	36
2.1 Reforming Cycle and Implementation Success in Instructional Reforms	36
2.1.1 Top-down Approach to Reforming Instruction	37
2.1.2 Bottom-Up Approach to Reforming Instruction	41
2.1.3 The Blended Approach to Instructional Reform	43
2.2 Phases of Reforming Curriculum and Pedagogy	47
2.3 Learning Organization: Disclosing existing Discourse	50
2.3.1 Meaning and Its Nature	50
2.3.2 Organizational Learning in School Context	53
2.4 Learning entities	54
2.5 Unique features of a Learning Organization	58
2.6 Constructivism, constructivist view of learning, and post-1994 instructional reforms	60
2.7 Determinants of OL in the context of learning post-1994 instructional reforms	64

2.7.1 Factors within the reform and reformers	64
2.7.2 Teacher Resistance	67
2.7.3 Leadership	68
2.7.4 Other factors	70
2.8 Theoretical framework	72
2.9 Conceptual Framework	77
CHAPTER THREE	
RESEARCH METHODOLOGY AND DESIGN	83
Introduction	83
3.1. Ontological and Epistemological Stance	83
3.2. Setting the Scene	84
3.3. Research Approach and Design	85
3.3.1 Research Approach	85
3.3.2 Research Design	86
3.3.3 Case selection	88
3.4 Data Sources	89
3.5 Sampling techniques	89
3.6 Research Methods	90
3.6.1 Data Collection Methods and Procedure	90
3.7 Methods of Data Analyses	92
3.8 Ethical Considerations	94
CHAPTER FOUR	
DATA ANALYSIS AND INTERPRETATION	95
Introduction	95
4.1 Tradition of reforming education and curriculum in Ethiopia	96
4.2 Reform approach and the constitute features	97
4.2.1 Major Findings	100
4.3 Magnitude of being a learning school	109
5.2.1 Background Information	110
4.4 Mechanisms of learning post-1994 instructional reforms in case schools	118
4.4.1. Case-by-Case Analysis	119
4.6 Cross-case analysis	148

CHAPTER FIVE

DISCUSSION	158
Introduction	158
5.1 The reform tradition in Ethiopia	158
5.2 Magnitude of OL in Schools	161
5.3 Organizational learning mechanisms in the case schools	166
5.4 Conditions fostering and inhibiting OL in Schools	171
CHAPTER SIX	179
SUMMARY, CONCLUSION, AND RECOMMENDATIONS	179
6.1 Summary	179
6.2 Conclusion	183
Appendix-2a	225
Questionnaires for Teachers	225
Appendix-2b	230
SLO Questionnaire Amharic Version	233
Appendix-3	238
Appendix-4: Transcriptions	240

List of Figures and tables

Table 2.1: Philosophical intent of constructivism	60
Table-3.1: Number of schools functioning before or at 1994 per administrative zone.....	89
Table-3.2: Participants selected from the case schools.....	90
Table-3.3: Psychometric properties of the scales and sub-scales of the questionnaires.....	91
<i>Table 4.1: Synthesis of reform approach and reform elements across political regimes.....</i>	<i>98</i>
<i>Table 4.2: Summary of Teacher Characteristics.....</i>	<i>110</i>
<i>Table 4.3: Summary of School- Related Variables.....</i>	<i>112</i>
<i>Table 4.4: Level of Practicing Organizational Learning by School Levels (Thinking dimension).....</i>	<i>113</i>
<i>Table 4.5: Level of Practicing Organizational Learning by School Levels (Action dimension).....</i>	<i>114</i>
<i>Table 4.6: Mean Learning of post-1994 Instructional Reforms by Personal Teacher Agency.....</i>	<i>116</i>
<i>Table 4.7: Independent samples t-test by School level.....</i>	<i>117</i>
<i>Table 4.8: Analysis of Variance by Perceived Level of CPD Implementation.....</i>	<i>117</i>
<i>Table 4.9: Multiple Regression Analysis.....</i>	<i>118</i>
Table 5.1: Constructs of LO by Case Schools.....	149
Table 5.2: Constructs of LO by Case Schools.....	151
Table-5.3: Conditions fostering or hindering OL in the case schools.....	154
<i>Figure 1: OL by Agency: mean comparison.....</i>	<i>115</i>
Figure-2: Agenda priorities in Case-1.....	123

Abbreviations and Acronyms

AAU	Addis Ababa University
APA	American Psychological Association
COP	Community of Practice
CPD	Continuous Professional Development
CT	Change Theory
CTE	College of Teacher Education
EGMA	Early Grade Mathematics Achievement
EGRA	Early Grade Reading Achievement
EPRDF	Ethiopian People's Republic of Democratic Federation
ERGESE	Evaluative Research of the General Education System in Ethiopia
ESDP	Education Sector Development Program
ESR	Education Sector Review
ETP	Education and Training Policy
FGD	Focus Group Discussion
GDP	Gross Domestic Product
GEQIP	General Education Quality Improvement Program
HDP	Higher Diploma Program
ICDR	Institute of Curriculum Development and Research
KII	Key Informant Interview
LO	Learning Organization
MOE	Ministry of Education
NLAs	National Learning Assessments
OECD	Organization for Economic Co-operation and Development
OL	Organizational Learning
OLMs	Organizational Learning Mechanisms
OLT	Organizational Learning Theory
PCK	Pedagogical Content Knowledge
PLCs	Professional Learning Communities
SIP	School Improvement Program
SLO	School as Learning Organization
SLOQ	School as Learning Organization Questionnaire
SNNP	Southern Nations, Nationalities and Peoples
TESO	Teacher Education System Overhaul
TGE	Transitional Government of Ethiopia
TLC	Teacher Learning Community
TTCs	Teacher Training Colleges
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	United States Agency for International Development

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Abstract

Organizations, including schools, can transform into learning organizations (Can, 2010; Knapp, 2008; Senge et al., 2012; Kools & Stoll, 2017). In educational settings, organizational learning (OL) manifests through cognitive and behavioral shifts among learning entities—personal, team, and organizational agencies—in pursuit of institutional goals (Hora & Hunter, 2013). This study investigates the learning of post-1994 instructional reforms (e.g., active learning, continuous assessment, action research, reflective practice) in primary and middle schools through a sequential explanatory mixed-methods design integrating change and organizational learning theories. Accordingly, phase-1 conducted a systematic literature review of reform endorsement processes; phase-2 surveyed 48 randomly selected schools in the Amhara regional state (N=785 teachers, F=390) to quantify learning organization attributes; Phase-3 performed qualitative case studies of two contrasting schools (N=12 participants) via interviews and document reviews. Key findings reveal: (1) reforms were persistently top-down, excluding grassroots practitioners—a tradition entrenched across the last eight decades of Ethiopian education reform; (2) Level-III schools demonstrated stronger learning organization constructs and characteristics than Level-II schools; (3) Level-III schools, which benefited from good leadership, actively and innovatively applied government-prescribed organizational learning mechanisms; (4) servant leadership optimized government-endorsed OL mechanisms; and (5) leadership emerged as the paramount factor enabling or constraining OL. The study also identified organizational learning disabilities (reform fatigue, institutional amnesia, self-censorship, Golem effect), particularly in poorly led schools. Grounded in these findings, three entrenched assumptions are challenged: (i) leadership quality (more than teacher quality) determines reform success in top-down reform contexts; (ii) assessment mandates (not pedagogical inheritance) shape teaching practices; (iii) learning capacity (not entry achievement) influences teacher engagement with reforms. The study concludes that Ethiopia's top-down reform tradition fundamentally inhibits meaningful OL, perpetuating cyclical failure, and recommends participatory reform frameworks to disrupt this pattern, alongside future research directions.

Keywords: educational change, Ethiopia, instructional reforms, organizational learning, school leadership.

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Educational ‘reform’ is a general term applied to any change, large or small (Dimmock, 1998) that could be introduced at national, regional or local level (Fullan, 2007 and 2011, Darling-Hammond, 2012). The concept of reform is often mistaken for innovation, and in some cases, the terms "innovation" and "reform" are used interchangeably in the field of education (Matei and Bujac, 2016; OECD, 2014). However, there are distinctive features that differentiate reform and innovation. To start with, innovation is from within (Matei and Bujac, 2016) whereas reform has a top-down nature (Sidorkin and Warford, 2017). Innovations encourage risk taking behavior and usually happen at the frontline of the system in schools and classrooms while reforms are top-down and rigid, which ‘favor obedience and discourage risk-taking’ (OECD, 2014, p.4) behavior. Sidorkin and Warford (2017) explain the difference between the two concepts in terms of power relations; they claim that reforms are endorsed by those who have power to execute (for instance managers) and “intend to change how their subordinates work”. However, ‘innovations are generated or adopted’ by those who aspire to change their own way of getting things done. Thus; they argue (p.5),

...a school superintendent is more likely to be a reformer, while a school teacher [is]—an innovator. At the same time, a school principal, who changes the way she does her own work, is an innovator. The same principal who encourages her teachers to change their teaching is acting as a reformer.

This implies, ‘who decides to change practice and who is to change way of doing things’ are the criteria to differentiate between these terms. The same authors citing Roger’s work (2003a, b) coined three types of innovation decisions namely innovation decisions by: (i) individuals, (ii) collectives, and (iii) authority. The third classification according to them is reform. Thus, based on this classification the term reform is preferred to innovation in the context of this study since there is assertion which argued that the post-1994 instructional reforms in Ethiopia have been endorsed following the top-down approach (Areaya, 2016; Semela, 2014; Tessema, 2007; and Tefera, 1996).

Reforms and reforming education, especially in the last three decades are active all over the world (Hallinger, 2012; Darling-Hammond, 2012; and Barber and Mourshed, 2007) including Ethiopia. These reforms are imposed by the decision of the government (Young and Levin, 1999) and/or introduced following suggestions from scholarly efforts, policy makers, and international and multilateral organizations (Collins and Rhoads, 2010; Daun, 2006; cited in Semela, 2014). There are also reforms initiated by schools (Sidorkin and Warford, 2017).

Government bodies, with the desire to respond either to the worsening quality of education or to heighten positive outcomes in students' learning, are trying to embrace these reforms one after the other. According to Darling-Hammond (2012, p.21) “nearly all countries are engaged in serious discussion of ...reform to address demands for much higher levels of education for much greater numbers of citizens (p.21)”. According to the writer, the push for aggressive educational reforms is driven by the rapid changes of the 21st century, including economic shifts, evolving concepts of democracy, and the demands brought about by technological advancements—all of which place significant expectations on educational institutions to address and adapt to these challenges.

Darling-Hammond (2012, p.22), appreciates politicians' and policy makers' enthusiasm for embracing educational reform; but she concurrently reminds them on the questions that seek answer before introducing any reform. The questions that she reminds politicians to answer are “What kind of reform is required? Toward what end? Using what policy strategies in what ways? With what supports and resources? And with what attention to side-effects?” Her inquiry reminds reformers to critically consider the means and ends of educational reforms as well as the context where the reforms should be implemented.

Although myriads of education reforms have been introduced all over the world, “reforms addressing schools have acquired more salience at a global level, as a policy tool to improve quality” (Tatto and Mincu, 2009, p.2). More specifically, reforms which aim to improve teaching and learning are well trusted in improving students' learning and quality of education (Clarke, 2011; Fullan, 2011; Hattie, 2003 and 2009; and Dimmock, 2000). In support of this view, Fullan (2011, p.14) posited that dwelling on instruction while reforming education mobilizes the whole system, and teacher quality is only a “proxy [indicator] for effective

instruction”. Thus, education reforms that do not incorporate changes in instruction couldn’t be a significant change at all (Fullan, 2007).

In the same vein, scholars who studied successful school systems (Barber and Mourshed, 2007; Mourshed, Chijioke, and Barber, 2011) underscore on instruction for successful student achievement, especially in the context of reforms (Polikoff, 2010; Zachry and Schneider, 2010). For instance, Barber and Mourshed (2007) after studying 25 successful school systems reported that reforms that aim to: bring the right individual to the teaching profession, works to developing them into effective teachers and promote effective delivery of instruction to the children are successful. Similarly, studying 20 school systems, Mourshed, Chijioke, and Barber (2011) reported related finding; they have found that school systems that raise caliber of teachers and principals joining the profession, creates un-intermittent professional support to teachers and school leaders and have system-sponsored innovations across schools are progressing from ‘great to excellent’ journey.

Thus, more successful reforms are those which consciously built high quality teaching and learning systems (Darling-Hammond, 2012; Fullan, 2007 and 2011). On the contrary, instructional reforms which focus on competition and incentives and those which are inconsistent are seldom successful (ibid). With regard to this, Darling-Hammond (2012) has stated the following points:

The nations that have most dramatically improved education have undertaken ... reform[s] in a systemic fashion, rather than pouring energy into an ever-changing array of innovations and fads that change with the political winds every few years (p.26).

Ethiopia is not an exception, the 1994 Education and Training Policy (ETP) and its directives that follow have introduced system-wide reforms in the sector. The education and training policy statement (MoE, 1994) focuses on four major areas of reform, one of which is improving the quality of education (MoE, 1998). Similarly, in ESDP-II the government planned to reform the curriculum of primary grades so that the learning materials could “improve the problem-solving capacity of the students” (MoE, 2002, p.12).

Such curriculum reforms call for concomitant changes in teachers’ classroom practice. In this regard, ESDP-II (2002, p.24) has gone to the extent of defining quality in education in terms

of proper implementation of these instructional reforms; consequently, quality in education is stated as “processes through which teachers use child-centered teaching approaches in well-managed classrooms and schools ... skillful assessment to facilitate learning, [and action research].” Similarly, the post-1994 instructional reforms are commonplaces of the series of ESDP documents that came after ESDP-II (2005, 2010, 2015, and 2020) so do in the recent education transformation programme (MoE, 2023). Consequently, the Federal Ministry of Education in the new curriculum framework of General Education plans to intensify the proper implementation of these instructional reforms (MoE, 2020), which itself has confirmed that the reforms were not implemented as intended and plans to address this through additional programmatic and structural reforms, which will be mandated for teachers.

These instructional reforms have been ensembles introduced to create citizens having profiles stipulated in the ETP. Nevertheless, even after decades of implementation of these reforms, the MoE regrets that primary school teachers’ pedagogical skills are still below the level needed to apply the active learning and continuous assessment techniques required by the new curriculum, which epitomizes the failure of these reforms (*see also Melese, Tadesse and Assefa, 2009*). Thus, investigation into how schools learnt these reforms including the approach of endorsing the reforms is worthwhile and timely because of the following rationales:

- i. The failure of post-1994 instructional reforms such as student-centered education, continuous assessment, action research, and reflective practice is real, but the reasons why their implementation fall short of improving teachers’ classroom practice doesn’t seem consistent;
- ii. The empirical researches conducted on educational reforms and in particular instructional reforms of post-1994 Ethiopia are found in reasonable number, but the research works that examine how schools learnt the reforms seem scant as compared to researches that dwell on assessing implementation of these reforms vis-à-vis the aspirations of the ETP.
- iii. The availability of strong scientific evidences that building a learning school is a necessity for a better classroom practice, especially student learning using the constructivist approach necessitates the learning of a school community through same approach (Beauregard, 2015; Smith and Lyles, 2011; Miles, 1995; Hargreaves, 1995).

- iv. The post-1994 instructional reforms which have been endorsed by the 1994 Education and training policy and unpacked by the TESO have been also made priority areas in the 2023 new education and training policy (2023), and particularly in the general education curriculum framework (2020) and the education transformation program (2023).
- v. Last but not least, my experience as teacher educator in training primary school teachers for more than a decade and my research engagement in issues of Ethiopian education policy especially, in primary teacher education area has deepened my skepticism about the coherence among the policy elements.

1.2 Statement of the problem

The Rhetoric: focus in Sub-Saharan Africa

The 1990s were the time when Africa experienced wave of educational reforms (Altinyelken, 2010; Chisholm and Leyendecker, 2008; Eger, 2016) and a great deal of these reforms were related to pedagogy (Eger, 2016; Dimmock, 2000). For example, in Uganda, Botswana, and South Africa; great efforts were made to “popularize and institutionalize the reformed pedagogies” (Altinyelken, 2010, p. 151). The very intention of these reforms was to improve education quality by altering Africa’s entrenched tradition of authoritarian, teacher-dominated and lecture-driven pedagogies (Altinyelken, 2010; Tabulawa, 2013) along with outmoded student assessment. The international development agencies through their funds are claimed to be the main actors for smuggling these reforms (Tabulawa, 2013; Dahlstrom and Lemma, 2008, Dahlstrom, 2007 and 2009).

Unfortunately, while instructional reforms introduced in some spots of the developed nations have success stories; waves of reforms in the third world countries, especially in the sub-Saharan Africa have generally failed to penetrate into the classroom (Nordstrum, 2015; Tabulawa, 2013; Hallinger and Lee, 2013; Altinyelken, 2010; Chisholm and Leyendecker, 2008, O’Sullivan, 2002; Dimmock, 1998,). Country profiles developed for sub-Saharan African countries by the Vrije Universiteit, Amsterdam, as part of a larger study on Science, Maths and ICTs in Secondary Education indicate the prevalence of ‘traditional pedagogies’. Chalk and talk teaching strategies, largely aimed at verbal recall of factual information and definitions are

described as characterizing pedagogies (Tanzania, Uganda, Nigeria, Ghana, Botswana, Namibia, Senegal and South Africa) in Africa (Ottevanger, van den Akker, de Feiter, 2007).

The gap between policy and practice, as in these West, East and Southern African contexts is also a reality in Ethiopia which becomes difficult to achieve in practice unlike in policy. The statement by Altinyelken (2010, p.152) represents the reality in most African classrooms. It is read as:

Many African countries have adopted reforms of teaching and learning based on constructivist principles. These new paradigms include active learning, problem-solving, learner-centred and discovery approaches, whereby students not only acquire information but also do something active with it; [though there is little sign of it in the classrooms].

In the same vein, Cunningham (2018:3) who reflected on East Africa's pedagogical practice wrote "observations of classroom practice ... today are worryingly similar to those of 30 or more years" ago.

There are different versions of attributions explaining the reasons for the failure of these reforms: Wagner (2000) attributed the failure to three causative factors: (i) overemphasis on covering subjects than assessing competencies vis-à-vis clear academic goals, (ii) absence of collaboration among teachers and other stakeholders, and (iii) reluctance to create a caring community with explicit core values. The missing of one or more of these elements, the same author posited, leads to failure of the reforms. Others such as Darling-Hammond (2012) and Fullan (2011) claim that only those reforms which address the whole system are effective and, for Fullan (2011, p.3), a whole system reform is a reform that touches 100 per cent of the system: "a whole state, province, region or entire country". Reforms that "foster intrinsic motivation of teachers and students; promotes continuous improvement of instruction and learning; inspire collective or team work and affect all teachers and students," according to Fullan (2011, p.3), are right drivers for whole system reform; in the contrary, reforms which lack these elements are destined to failure. In the same vein, Schleicher (2011) emphasized on the engagement of grassroots level practitioners in the process of initiating instructional reforms; unlike the practice in a few decades back, designing reforms "capable of changing learning outcomes" is hardly possible if not "supported by those who deliver the system" (p.56). Thus, teacher engagement in instructional reforms is very vital for successful implementation. Fullan (2011, p. 15) also

substantiated this, as he posited “If policy makers don’t ‘get’ this one [teacher engagement in reforms], I can guarantee you they will choose the wrong drivers [of whole system reform]”. Over emphasis given to teacher engagement may be due to the fact that “only reforms that are successfully implemented in classrooms can be expected to be effective” (Schleicher, 2011, p.55).

In addition, resistance of teachers is common against fundamental changes to the status quo because of the fact that such changes raise uncertainties (Schleicher, 2011; Dimmock, 1998), which could be another attribution for the failure in connection to teachers. Burney and Elmore (2011, p. 16) too has affirmed that teachers disengagement while introducing instructional reforms is the underlying reason for the reform failure. They further noted, for learner-centred education to take root in African classrooms, teachers need to understand the underlying idea, be motivated to change practice, adapt and apply appropriate pedagogies, and have the capacity to do it. Besides, teachers’ values, practices and beliefs also shape the outcomes of implementation (McLaughlin, 1993) of reforms.

Thus, most educational reforms introduced without active and willing engagement of teachers are subject to failure. The rationale is obvious; i.e, “teachers are experts in teaching and learning and thus can make an essential contribution to the design of reforms” (Fullan, 2007, p.56). This shows the necessity of bottom-up backup for any educational/school reform to have a successful story.

Dimmock (1998) attributed the failure of instructional reforms to refusal of schools to understand their roles; he argued that schools are dynamic and multifunctional organizations sanctioned to “engage in learning, teaching, managing, organizing, leading, decision making and so on”. Reluctance to understand these roles and rigidity of schools with respect to changing teaching and learning have been reported as the major reasons for unsuccessful reform. The other version states that pedagogical practices are resistant to reform because of the fact that they are multidimensional, complex and vast (Spillane and Louis, 2005). They also necessitate change in action and, value and belief (Fullan, 2007). As a result, the stories in Sub-Saharan Africa verify that changing teachers’ traditional classroom practice appears difficult to realize in a hurry (Altinyelken, 2010).

There is also a claim that associates the failure with the source of the reform ideas (Tabulawa, 2013; Chisholm and Leyendecker, 2008; Crossley and Watson, 2003; Burney and Elmore, 2011; Dimmock, 1998); that is, most or all of these reforms are alien to the host countries' context. Dimmock (1998), for instance, states that only a few countries are origins of most reform ideas in teaching and learning so do in education in general. Consequently, other countries and states are reform importers often with little adaptation. Reforms imported with little consideration of the country context are deemed to failure (Tabulawa, 2013; Crossley and Watson, 2003). Surprisingly, most implementation of reforms happens with little regard for available capacities in the context (Burney and Elmore, 2011).

Thus, with respect to implementing instructional reforms, literature shows that the gap between policy rhetoric and reality on the ground is wider, especially in sub-Saharan Africa; and weak teacher engagement in the reform process and alien nature of the reform ideas to the African context stand behind this assertion.

The Ethiopian rhetoric, reality and the discourse in between

In Ethiopia, post-1994 education policy directives sanctioned child-centred education, continuous assessment, reflective practice, and the development of critical thinking and problem-solving skills as statutory classroom practices. Yet, according to reports from MoE, donor agencies (such as the USAID and UNESCO) and local researches, these provisions remained aspirational rhetoric (Serbessa, 2006; Melese, Tadesse and Assefa, 2009). Government often heard attributing the failure to teachers' lack of commitment and pedagogical knowledge and skills (MoE, 2003). On the contrary, teachers have developed an alternative narration which attributes the failure to work load, lack of incentives, in adequate resources, and poor working conditions (Dagnaw, 2017; Tsehay, Belay, Seifu, 2024). These factors lead the attribution to make a vicious circle, where projection is the inherent phenomenon.

Thus, in the next sections, I tried to (i) unpack the rhetoric of the ETP and policy directives introduced to 'effectuate' the ETP, with more priority to reforms dealing with teachers and teaching-learning. However, due to its special emphasis toward constructivist pedagogies, I used TESO as a trajectory line to discuss the rhetoric back and forth; (ii) scrutinize the academic

discourse established so far by Ethiopian researchers with regard to post-1994 instructional reforms.

The 1994 Education and Training Policy

The Ethiopian education system traditionally experienced policy alteration following regime change. As a result, following the fall of the socialist regime from power, the Ethiopian People's Revolutionary Democratic Forces (EPRDF) has introduced its own policy typically known for its flagship of decentralization. The government claimed that this policy was unique from its predecessors, since it was participatory in its formulation, friendly to context, and focused on the country's age-old educational problems (MoE, 2002; Zewudie, 2018), albeit the scholarly discourse refuting the claim (Tefera, 1996; Tessema, 2007; Semela, 2014; and Areaya, 2016).

The ETP has identified issues of quality, access, equity, relevance, and efficiency as the major focus areas of Ethiopia's education system to deal with. And to ensure, especially quality and relevance in education, the policy aspired to change the curriculum, mode of assessment, and teachers' professional development towards the constructivist paradigm. Thus, in the next paragraphs, I tried to show the rhetoric in the ETP and its policy directives vis-à-vis instructional reforms.

Rhetoric in post-1994 education policy directives vis-à-vis instructional reform

Contents and pedagogy of the pre-1994 education have been considered futile in developing students' cognitive and problem-solving abilities and in installing desirable behavioral and attitude change (TGE, 1994; MoE, 2002; and Zewudie, 2018). The ETP also accuses previous regimes for 'inefficient, irrelevant and poor quality of education which had been accessible to the few' (Zewudie, 2018). Particularly, government document produced to meet twin goals of elaborating the ETP and evaluating its implementation (MoE, 2002, p.1) has criticized the education and training offered in pre-1994 regimes on account of:

...limited positive impact on the lives of the people and national development [and limited ability] to solve the problems of farmers, pastoralist[s], and change the lives of the overwhelming majority of the people.

According to the assertion set in the prelude, ETP is meant to tackle those educational problems inherent to the system. Hence, it has set a grand objective of “cultivating citizens with an all-round education capable of playing conscious and active role in the economic, social, and political life of the country at various levels (p.16). To realize this objective, teachers are placed at the center of the axis where the high leverage lies; they are expected to create citizens with the above-mentioned profiles. Consequently, the policy makes teacher quality one of its special attention and action priority, which is envisaged to be realized via continuous education and training that would be given through pre-service and in-service teacher training programs. To this end, the ETP prescribed inauguration of a new professional career structure that must be attained via accomplishments of teachers in professional development.

In the same vein, evaluation of the ETP implementation, which MoE conducted in 2002 underscores increment of teachers’ training in quality and quantity to improve quality in primary education. This has been further elaborated in ESDPs (2005-2020), General Education Quality Improvement Programs, GEQIP (2008 and 2013), TESO (2003), General Education Curriculum Framework (2002), and in piles of publications produced with the active support from international donor agencies and partner organizations. The rationale for providing priority to teachers so as to come out of quality perplex is not a novel solution (Fullan, 2007; Hargreaves, 2004; and Darling-Hammond, 2012); it is as old as the profession itself; for teachers are frontline actors to implement the policy in general and constructivist pedagogies and assessment in particular.

Unfortunately, these pedagogies were not priorities of the ESDP-I (MOE 1998), a five years action plan that aimed to translate ETP into effect. Instead, more priority was given to the issue of expanding equitable access. Accordingly, the quality of neither teachers nor instruction process was a pressing priority. Instead, ESDP-I planned to measure quality vis-à-vis teacher qualification, availability of educational resources and students’ score in exit assessment (Grade-4 and Grade-8). But, measuring quality via examinations contradicts not only with profile of citizens the policy aspired to install but also with the criticism it forwarded against education system of old regimes. ESDP-II (MOE 2002) has the same focus to that of ESDP-I: expanding access equitably. The indicators for quality were also the same: minimizing textbook-student and student-section ratio, and increasing teachers in number and qualification. The Dakar framework

for attaining ‘universal primary education in 2015’ might have compelled Ethiopia to focus on expansion.

Nevertheless, ESDP-II had new provision too. It had planned to reform the curriculum in a way that could “improve the problem-solving capacity of the students and to make them more productive members of the community who respect the human rights and democratic values” (p.12). It has also planned to commence “child-centered education and activity-oriented learning approaches, and continuous assessment of pupil achievement, p.24”. Suggestions from evaluation of implementation of ETP (MoE, 2002) and review of primary school curriculum by the Institute of Curriculum Development and Research, ICDR (2001) might have helped MoE to re-divert its attention to these constructivist instructional reforms.

To conclude; the ETP and its directives aspire to prepare citizens who develop 21st century skills such as problem solving, critical thinking, collaborative interaction, and respecting others and own rights. To realize this, it gave priority for teachers who are responsible to make a pedagogical shift toward constructivist classroom practice.

The Rhetoric since TESO (March 2003)

Several documents have been produced to support post-1994 instructional reforms, with TESO being one of them. TESO aims to translate educational policy into teacher training programs and curricula. Thus, the synthesis that follows tries to expand the rhetoric stipulated in the ETP and its directives, based on the TESO document and local researches conducted so far on TESO.

Comprehensive research on the quality of teacher education (MoE 2002) has disclosed issues lingering in the country’s teacher education system. Teacher Education System Overhaul (TESO) was thought to be a paradigm shift launched to lighten those weaknesses of teacher education in particular and the entire education system in general (MoE 2003, Mihiretie, 2008 and Engida, 2006). This system overhaul constitutes five themes¹ developed by twenty-five professionals of which eleven were foreign experts from donor agencies.

¹ Teacher Educators, Pre- Service Selection Criteria, Pre-Service Teacher Education Programmes, Continuous Professional Development and Special Upgrading Programmes

The provisions aimed at transforming teachers' classroom practice by changing pre-service teacher training programs and in-service teacher development. The resultant effect of this provision, according to the TESO team, was democratizing teacher education (MoE, 2003). By democratizing, it means changing education in Teacher Training Colleges (TTCs) and primary schools in a way that could allow students and teachers "make decisions and take initiatives and control of their world" (MoE, 2003, p. 34).

The instructional process is considered central to democratize education by transforming teaching and learning into constructivist pedagogies in which active learning, reflective teaching, action research and continuous assessment and development of problem-solving skill were highly valued. Stated otherwise, substituting: the long stayed 'passive learning' approach by active and learner-centered one, traditional paper and pencil tests by continuous assessment, and knowledge acquisition by knowledge construction was TESO's aspiration. To this end, TESO (p.35) promised to support the preservice program with "a practical teacher handbook that provides examples of topics on teaching, active learning and continuous assessment. Besides, practicum and action research were provided as strategies to speed up the paradigm shift in the preservice teacher education program (MoE, 2003), and constructivist instructional reforms are the heart of these strategies.

These provisions have been common prescriptions in successive policy directives that guide pre-service teacher education program together with or after TESO; such as the ESDPs (MoE, 2005, 2010, and 2015), Framework for Primary School Teachers' Continuous Professional Development (MoE, 2009), Curriculum Framework for Primary Teacher Education (MoE, 2013), Teacher Professional Standard (MoE, 2013), and Standard for Primary Schools (MoE, 2014). For example, the curriculum framework (p.1-2), though endorsed after termination of TESO intensified the provisions in the following way:

Curriculum framework adopts the principles of active learning ...as the most flexible means to achieve the desired changes (p.1). Thus, 'exploring, observing, experimenting and practicing rather than simply being passive receivers of knowledge' appears more focused. This approach is based on the constructivist theory of teaching and learning (p.2).

With regard to in-service program, TESO placed these instructional reforms at the center. Accordingly, it promises continuous and coherent professional development program for primary

school teachers (CPD) and teacher educators in TTCs which prepare primary school teachers (HDP and CPD) (Mihiretie, 2008). Review of the CPD framework endorsed by MoE in 2003 and 2009 and the HDP manual endorsed by MoE in 2003 shows that post-1994 instructional reforms have been core contents of both programs, CPD and HDP.

The CPD for primary school teachers is meant to equip them with skills and knowledge of post-1994 instructional reforms. For teacher educators, it aimed to, among others, enhance their abilities in preparing primary school teachers so that primary school teachers can assist children to acquire knowledge, skills, values and attitudes, according to their age, aptitude and abilities by applying constructivist pedagogies. The net effect would be establishment of system and culture for continuing professional development through diverse routes and in accordance with the principles of lifelong learning (MoE, 2003).

These provisions clearly indicate the need to institutionalize constructivist instructional pedagogies into TTCs and further to primary and middle schools. The statement below shows MoE's interest to institutionalize post-1994 instructional reforms (MoE, 2003, p.5).

It is made absolutely clear that continuous professional development is part of a process of **lifelong learning**..., [that] must be systematically developed, effectively coordinated, and efficiently managed. It is not just an issue for teachers but for all sectors with an interest in the education of students (p.105); [Emphasis added]

Structural and programmatic reforms have been introduced to support teachers' continuous professional development (MoE, 2002 and 2003). For instance, school clustering is one of these structural reforms targeted to transform primary school teachers' classroom practice by institutionalizing post-1994 instructional reforms. Of course, this has been a suggestion following evaluation of ETP implementation (MoE 2002). Much has been expected from these centers so as to promote teachers' professional development, and institutionalize those reforms. They were thought to be epicenters for lifelong learning where teachers:

‘...receive short-term trainings and be familiar [to] the new appealing and student-centered classroom teaching- learning process ... that replaces the old teacher-centered approach (MoE, 2002, p.51).

Specifically, it has been designed to help teachers to exchange classroom pedagogic experiences by learning from each other, train each other with respect to applying active learning

methods, prepare teaching aids by using the equipment in the resource centers, evaluate textbooks, enrich them, and make suggestions for improvement, and get supports from supervisors coming from Woredas, Zones, Regions as well as other invited professionals.

With regard to programs, School Improvement Program (SIP) has been launched since ESDP-III (MoE, 2005), and one of the reasons the ministry decided to introduce this program is to improve teachers' professional practice in line with constructivist pedagogies.

The school-college link and practicum programs were intended to bridge between the pre-service and in-service program. That is, via school-college link, TESO hopes to link TTCs and primary schools so that teacher educators could “understand more about primary school teaching” and notice the differences in instructional practice between primary and middle schools and CTEs vis-à-vis implementation of post-1994 instructional reforms. The link is meant to carryout research that could improve teaching and learning in both TTCs and primary and middle schools, increase curricula relevance in TTCs and strengthen experience sharing between teacher educators and primary school teachers to the advantage of both parties involved. Unfortunately, this and other provisions of TESO remained only lip services² (Mihiretie, 2008).

Thus, the very essence of TESO is to improve teachers' classroom practice vis-à-vis post-1994 instructional reforms. The paragraph quoted from TESO verifies this intention (p.37):

prepare teachers who can promote active learning and the development of problem-solving skills through a learner centered approach using a curriculum where content and methods are integrated, [and] who practice democratic principles in classroom interaction and in the whole school... committed to change and continuous improvement.... prepare teachers who can effectively apply continuous assessment and evaluation to students' learning, and have basic knowledge and application of action research

A system overhaul that was once thought to be silver bullet to deep-rooted problems in teacher education was terminated by the decision of the MoE probably because of the running academic discourse (Tessema, 2014; Semela, 2014) and public discontent towards worsening quality of education. Its top-down nature (Semela, 2014; Areaya, 2016) that left practitioners in the peripheries, more emphasis to neoliberal ideas (Engida, 2006; Dahlstrom and Lemma, 2008),

² Not only this, but also other provisions of TESO such as preparation of handbook of teacher education, introducing CPD for teacher educators and a provision to launch quality assurance program in CTEs remained on paper.

and conflict regarding the question of right balance between subject matter, PCK and professional courses including practicum (Mihiretie, 2008) might have speed-up its termination. Nevertheless, its provisions namely student-centered education, continuous assessment, reflective practice, and action research have continued to influence successive reforms in primary teacher education (MoE, 2008³; 2009a⁴; 2009b⁵ and 2013a⁶; 2013b⁷), continuous professional development programs, teacher professional standards (2013) and school standards (2014) in primary schools so does the dissatisfaction towards primary and middle school teachers' classroom practice.

Thus, TESO proposed new ways of teaching and assessment that requires teachers and students to shift into new way of classroom practice. The role of the teacher has changed from purveyor of knowledge to a facilitator and that of students to explorers than mere receivers. Accordingly, at colleges the percentage of subject matter courses has got minimized in favor of professional courses and practicum. Nevertheless, severe critiques rose before TESO come into full-fledged implementation (See Mihiretie, 2008; Engida, 2006; Tessema, 2014; and Semela, 2014).

First, TESO was more transformative than the policy itself since it aspires to transform the long-stayed classroom practice. Second, though TESO and successive reforms after it aspire to transform teachers' classroom practice into the constructivist approach; it is hard to find evidence verifying the reformers' transformation. That is, there is a counter argument that states the ETP and TESO were prescriptions of reformists (Tessema, 2014; Semela, 2014; Areaya, 2016) not yet bought by grassroots level practitioners. Third, there is an assertion that curriculum design and assessment practice contradict with provisions of TESO and the successive reforms that aim to guide classroom practice. That is, curricula and state assessment focus on 'what' of learning while the TESO provisions dominantly advocate the how of learning (Mebratu and Hoot, 2005; Tessema, 2014).

³ Cluster vs Linear primary school teacher training modality that replaces the TESO modality

⁴ General Education Curriculum Framework

⁵ Continuous professional Development framework for primary and secondary schools

⁶ Framework for primary school Specialist Vs Generalist teacher training modality

⁷ Teacher professional standard

According to Mebratu and Hoot (2005), primary school teachers today are not adequately prepared to implement the instructional methods recommended in the post-1994 reforms. Both current teachers and teacher educators have been trained in traditional, teacher-centered approaches, where the teacher delivers information, and students focus on memorization. The authors suggest that, to break away from this traditional model, in-service training programs within schools must be reformed.

Local research findings: uncovering the moving discourse

Research have been conducted and published so far in different packets of the country regarding post-1994 instructional reforms (Lemessa, 2017; Areaya, 2016; Semela, 2014; Hindeya and Endawoke, 2013; Belayneh, 2012; Hailu, 2009; Kenea, 2009; Melese, Tadesse and Assefa, 2009; Mihiretie, 2008; Ayele, 2007; Dahlström, 2007; Asgedom et al., 2006; Tuji, 2006; Serbessa, 2006; and Endawoke, 2004). These small- or large-scale scholarly works in sum have gone far distance in studying constructivist pedagogical reforms across the entire education ladder using either quantitative or qualitative or both approaches. They also differ in the discipline of focus, subject of the study, and emphasis of the instructional reform (student-centered learning, continuous assessment, inquiry learning or quality in education). Nevertheless, the findings are at odds with the aspirations of the ETP and its directives; that is, those presenting success stories in the implementation of the post-1994 instructional reforms in a way to meeting the ambitions set in the 1994 education and training policy documents are lacking. There are also others (such as Asgedom, 2006; Semela, 2014) who vividly showed the quality decline or stagnation and especially deplorable condition in primary and middle schools.

Nevertheless, the assertions for paucity of success stories differ: teachers, students, government, context and curricula were among the most cited impediments for which the failure has been ascribed. The common antidote prescribed by these researchers is to make intervention on either of these elements of the system.

Thus, in the next pages, I tried to review existing local research evidences published so far mainly for two reasons. First, the assertion stated in preceding section regarding failure of instructional reforms is neither a gut feeling nor intentional belittling; rather, it is based on empirical evidences from scholarly discourses. Second, it is to support own argument that the

failure of these reforms could not be ascribed to a specific or couples of variables entertained alike previous researches; rather, it appears systemic that emanates from the agency operating at school and government level. In other words, it is to show that there is a research gap especially with respect to the causations for which the failure has been accredited.

The Gap between Rhetoric and Reality

Articles that have been published by Ethiopian scholars since 1996 to date, and accessed by the researcher were reviewed. These articles attempted to scrutinize post-1994 instructional reforms vis-à-vis policy provisions either directly or indirectly, and reported that the gap between the rhetoric and the reality on the ground has seldom narrowed. This popular discourse is established towards constructivist pedagogy especially student-centered education has been the epicenter of this discourse. The felt gap is described in terms of either quality decline-stagnation continuum (Semela, 2014; Asgedom et al., 2006) or supremacy of traditional teaching methods over constructivist pedagogies (Melese, Tadesse and Assefa, 2009; Mekonnen, 2007; Tuji, 2006; Serbessa, 2006; Endawoke, 2004) or in terms of prevalence of overwhelming behaviorist epistemic beliefs among teachers (Mihiretie, 2008).

With regard to quality; it is declining across levels and especially dreadful in primary and middle schools (Semela, 2014; Asgedom et al 2006; and Serbessa,, 2006). According to Serbessa, (2006, p.137), the status of quality “in most primary schools throughout Ethiopia is both compelling and disturbing” and government is “face[ing] the challenge of ensuring ...quality education.” In the same vein, Asgedom et al (2006) confirmed the stagnation or declining of education quality in primary schools as a result of twin but competing goals quality and access. This is not of course exaggeration as it is easily corroborated by the assessment scores from government agencies and international organizations, such as NLAs, EGRA and EGMA and official government documents such as the ESDPs. For instance, the EGRA studies (2010, 2014) shows that children in first cycle primary schools were not developing the basic language skills required to learn effectively in later years, in which only 5% were able to perform to the standard in reading fluency (2010) and more than half were nonreaders⁸ (2014). Obtained scores from

⁸ Children who scored a zero point on the Oral Reading Fluency portion of the EGRA

EGMA (Asfaw, 2015) and NLAs⁹ (NAE, 2002; 2008, 2010, and 2013) are behind the pass mark score set in the education and training policy, which is 50% (TGE, 1994). Putting together, the quality disaster and failure of post-1994 instructional reforms are real.

With respect to implementing constructivist pedagogical reforms sanctioned in ETP and its directives, it becomes difficult for teachers to make healthy shifts to constructivist pedagogical practice. Consequently, active learning methods in particular and constructivist pedagogies enshrined in policy documents in general are being implemented in stark contrast to the aspiration of those policy documents. The traditional methods of teaching rather overwhelm teachers' classroom practices (Lemessa, 2017; Belayneh, 2012; Melese, Tadesse and Assefa, 2009; Wudu, 2007; Tuji, 2006; and Endawoke, 2004). Students' participation in classroom instruction, according to Begna (2017) is dominated by learning experiences like watching and listening to the teacher and writing or drawing in exercise books (Begna, 2017). This has made instruction linger in its pre-1994 way of doing since teachers' "teaching-learning strategies still rely on" enforcing students "absorb fixed knowledge and giving-and-taking true/false answers" (Asgedom et al 2006, p.21). Similarly, neither its integral elements of constructivist pedagogical reforms such as problem solving (Mekonnen, 2007), continuous assessment (Serbessa, 2006), active learning (Lemessa, 2017; and Serbessa, 2006) nor its structural constituents such as self-contained teaching (Debebe, 2002) have been practiced as per the aspirations of the policy directives of post-1994 Ethiopia. Moreover, the programs enforced to arm teachers with these reforms such as the CPD, were reported to be rarely implemented (Hindeya and Endawoke, 2013; Gemed, 2014; and Seyoum, 2013).

The problem in primary schools and Teacher Training Colleges (TTCs) responsible for training primary schools appears more serious. Lemessa (2017:1) for instance finds out that "the system and actual [instructional] practices of the college predominantly remain traditional". In the same vein, Tadesse (2012) reported the overwhelming practice of conventional teaching methods in the sample CTE he studied.

Studies that involved students also reported similar findings; Kenea (2009) who studied students' reactions towards active learning methods in Higher Education context reported that

⁹ One of the purposes of GEGIP was to improve student performance as measured through the NLAs (Berry and Bogale, 2011)

students had negative reaction towards Learner-Centered Pedagogy (LCP). Tuji (2006) also reported low level of upper primary students' involvement in active learning. However, Aga (2005, p.49) unveils teachers in the case University he studied have used lecture method of teaching while "the learners preferred the active learning to the traditional lecture method of teaching". The contradiction may be due to the fact that Aga's study was based on self-report inventory collected from university students.

Thus, the scholarly discourse established towards education quality in general and constructivist pedagogical reforms in particular seldom show success stories; rather, it makes clear that the gap between the rhetoric and the reality is getting wider across the education ladder. Especially, the situation in primary schools is more serious (Semela, 2014) and more disturbing (Serbessa, 2006). Observation from TESO (p.105) describes the situation as follows:

It must be recognized that significantly large amounts of money and other resources have been invested in the education and training of teachers in both colleges and schools, yet it is abundantly clear that this investment has been largely ineffective in that it has not been matched by any great changes in the classroom practice of most teachers throughout the country

Attributions for the failure story

The assertions built around the failure; however, differ significantly and points toward teachers, school leaders, government, students, curriculum and the context. The paragraphs below try to analyze the existing discourse serially.

First, mainly because of existing body of knowledge that brings teachers on top of the variables that determine quality; most of the researches reviewed here make teachers basis for their unit of analysis and the causative factor that explains the lion's share of existing ill-practice of constructivist reforms. Accordingly, it is argued that the quality disaster has resulted from teachers' professional incapacity (Semela, 2014) or poor conception of reform ideas among teachers as change agents (Hindeya and Endawoke, 2013). In the same vein, Belayneh (2012), Tuji (2006), Wudu (2007), and Dagnaw (2017) ascribed the failure to teachers' beliefs, conceptions and convictions. In particular Dagnaw (2017) claims that the effective implementation of constructivist reforms was hindered by teachers' lack of dedication, large class sizes, limited time, skill, and materials. While summing up this notion Endawoke (2004, p.23)

conclude that “teachers practice any new instructional method if they have the knowledge of it, if they believe that it brings about the change they look for in their students, and when they are given the freedom to practice it (p.23).

This implies that the knowledge deficit teachers have, their wrong belief regarding the impact of the method on students’ learning, and lack of professional autonomy accounted for unsuccessfulness of post-1994 instructional reforms in general and student-centered education in particular. However, if the policy provision on the ‘learning of all students’ is well accepted, why do not all teachers learn to be good teachers? Why do these researchers strongly suggest to recruit prospective teachers from students in the top-tier? Why do they strongly insist the teaching profession to join the war for *chasing of talent*? According to the views of organizational learning, this assertion of the researchers seems dubious. That is, while the assumption they had about students is guided by incremental theory of intelligence, their assumption towards teachers is the opposite: entity theory of intelligence¹⁰. Accordingly, they suggest for bringing the best mind into the teaching profession.

Second, poor leadership and ill-conceptualization of reforms by change agents, and coercive reform tradition inherited by the government have been other line of argument on which the failure story stretches (Areaya, 2016; Semela, 2014; Alemu, 2009; and Tefera, 1996). That is, it is claimed that the reforms have been imposed from above without taking practitioners’ voice into consideration, which makes grassroots level implementers acquire false clarity toward the reforms.

Third, curriculum especially the influence of examination is another assertion (Ayele, 2007; Asgedom et al 2006; and Serbessa, 2006): while constructivists as well as policy provisions in Ethiopia advocate assessment as means to deepen students’ learning, government directives sanctioned it as a single outlet to determine the future fate of students. This trend has paramount influence on curricula design; that is, the critical roles examination scores play in student selection and placement by the government urges teachers to favor content coverage at the expense of learning with the help of constructivist pedagogies. In addition, students’ fear of taking complete responsibility for their own learning is considered as one of the critical factors

¹⁰ Resnick, L.B. and Hall, M.W. (1998: 105) wrote about two opposite theories of intelligence that have influenced classroom practice in the USA and elsewhere in the world: **entity theory** and **incremental theory**; while the entity theory view ability as unchangeable, the incremental theory view ability as changeable depending on the effort of the individual.

for the failure of constructivist pedagogies (Ayele, 2007); at face value, this may seem true, but it seems that there is another underlying reason related to examination behind the fear; that is, they feel that teachers know the specific contents and ways of stating it that appears in exams more than they do. Kenea (2009) who studied students' reactions towards active learning methods in Higher Education context reported that students had negative reaction towards Learner-Centered Pedagogy resulted from 'examination pressure'

Lastly, with regard to the context, large class size and paucity of instructional resources (Kenea, 2009; Ayele, 2007, Asgedom et al 2006; and Tuji, 2006) and to teachers' work load (Serbessa, 2006) have been common assertions that coerced teachers linger in the behaviorist paradigm and delay the implementation of instructional reforms. Moreover, the legacy of traditional education that claimed to favor saliency, non-argumentativeness and being submissive is also another causality related to context for which the failure of those instructional reforms is ascribed (Serbessa, 2006; Girma, 1963; cited in Belayneh, 2012). Such belief, according to Dahlstrom, (1999) cited in Belayneh (2012, p.33) "have put its own negative influence [in Ethiopia] on active learning strategies implementation, which strongly demands learners and their trainers to raise the how- and why- questions."

To sum up, the above review has the following implications: first, the failure of these instructional reforms is real; second, majority of the researchers consider ETP and its directives as standards against which to gauge teachers' instructional practice. Third, the discourse towards these reforms in particular and quality in general is built around input and process, and the emphasis given to teachers outweighs other variables, and this appears a tradition while reforming Ethiopian education since the last 50 years. Government tried to reverse the situation by: upgrading primary school teachers, allocating significant portion of the GDP, improving school facilities, prescribing more initiatives over initiatives, revising the curricula. And yet, these efforts have not yielded the results anticipated in the policy and policy directives. This is mainly because:

...new initiatives and structures alone are unlikely to lead to lasting change. Rather, sustainable change in schools is a function of the beliefs, norms, and expectations of those working within those schools, as well as their capacity for learning (Elmore, 2002; cited in Higgins et al 2012, p.3).

Moreover, organizations including schools are living in a challenging time because of the dynamism that prevails in the business world; thus, new ways of thinking and acting are mandatory to thrive in this challenging era (Senge, 1991). In particular, OL literature argues that organization is only as good as its learning ability (Senge et al., 2012; Law and Wah Chuan, 2015; Wellman, 2009; and Argyris and Schon, 1978).

However, it seems that much space is devoted not to how schools as agency of learning have learnt these reforms in their own context so as to multiply the knowledge rather, on compliance. That is, exploring or assessing the status of implementing instructional reforms and to the challenges that daunt their implementation overwhelms the discourse. A notable exception is a large-scale survey that is carried out by Geleta and Tafesse (2017, p.34) who reported ‘low favorable characteristics for [schools to] transform into a learning organization’. In addition, a full-fledged dissertation work has been conducted by Shega (2017) who studied how leadership enhance/discourage teachers’ commitment to OL in public and private secondary schools. Nevertheless; their efforts, though appreciable, is generic which fall short of delimiting specific contents of learning.

This implies strengthening internal capacity of schools to manage the change process seems overlooked both in practice and in academic discourse. Thus, from my experience as a teacher educator in training primary school teachers (12 years) and research experience in policy research centers (5 years), I am skeptical regarding the attributions made so far on why these reforms remain unsuccessful. Moreover, my reading on change theory (Fullan, 2007; Darling Hammond, 2012; Sarason, 1990) and organizational learning theory (Argyris and Schon, 1978; Senge, 1990 and 2012; Hargreaves, 2004; Murray, 2002) has strengthened my doubt.

Empirical studies on Schools as Learning Organizations (SLO) remain very scant in developing countries (Jamali and Sidani, 2008). In particular, little empirical work exists that applies organizational learning theory to study instructional practices; though OLT is a promising theoretical lens to study education (Hora and Hunter, 2013). Absence, especially of local research works examining SLOs convinced me that there should be an expansion of empirical works in this untouched area. And this could be considered as an eye-opening effort in this regard.

Thus; I argue that the reform approach followed by the government, the manner in which schools have learnt these reforms and the interface between government reform tradition and primary/middle schools' learning practice might have accounted for the failure. Therefore, this thesis work has a twin goal of examining how post-1994 instructional reforms have been introduced into the primary education system and how primary schools have learnt these reforms using two interlinked theories: Change Theory (Fullan, 2007; Chin and Bennes, 1994) and Organizational Learning Theory (Senge, 1990 and 2012), professional learning communities (Stoll and Kools, 2007; Hord, 2008). This interface has been described by Fullan (2007, p.28) as follows: "the unsuccessfulness of reform is related more to the way in which change has been introduced, and to the lack of opportunity for teachers to engage in sustained learning."

Consequently, this study is guided by the following basic research questions:

1. What do the reform approach and characteristics of post-1994 instructional reforms look like?
2. To what extent primary schools were built into a learning organization in learning the instructional reforms?
3. How do case schools have learnt the reforms like active learning, continuous assessment, action research, and reflective practice?
4. What factors fostered/inhibited case schools in the process of learning the instructional reforms?

1.3 Objectives of the study

General objective

The purpose of this study was to investigate the organizational learning of post-1994 instructional reforms in primary and middle schools by examining the nature of the reforms, the degree to which schools exhibit features of learning organizations in response, the specific learning experiences within selected case schools regarding key reform components, and the factors influencing this organizational learning process.

Specific Objectives:

- 1 To describe the reform approach and key characteristics of the post-1994 instructional reforms in Ethiopia.
- 2 To analyze the extent to which primary schools have developed features of a learning organization in the context of learning the post-1994 instructional reforms.
- 3 To examine how selected case primary schools have learned the post-1994 instructional reforms, namely active learning, continuous assessment, action research, and reflective practice.
- 4 To identify the factors that have fostered or inhibited organizational learning of the post-1994 instructional reforms within the selected case primary schools.

1.4 Scope of the Study

This study is delimited in scope conceptually, geographically, and in terms of the timing of reform. Specifically, it focuses on post-1994 reforms—such as active learning, continuous assessment, action research, and reflective practice—which are designed to promote constructivist classroom practices in primary school settings. In particular, investigating how those reforms were introduced and how the schools learnt those reforms was the main focus of the study. Change Theories and Organizational Learning Theory are the perspectives through which I tried to examine how these reforms have been introduced into primary schools and how primary schools have learnt these reforms respectively. Nevertheless, the study didn't address the structural and programmatic reforms introduced to support implementation of these instructional reforms.

Geographically, the study is limited to schools located in the Amhara regional state; as a result, the quantitative study tried to address primary schools operating under the authority of Amhara Regional State Education Bureau (ARSEB); but the qualitative study that follows targeted on two primary schools in the region, which were purposively selected based on the results from the quantitative survey conducted in 48 primary schools selected from 20 woredas of the north Shawa Zone.

With respect to the timeframe, instructional reforms introduced since the endorsement of the Education and Training Policy (1994) were the focuses of the study. As a result, it did not

directly address instructional reforms in pre-1994 era or ongoing reforms which have been introduced following the new education and training policy endorsed in 2023. The reason for excluding the recent reforms is due to the fact that the new policy and the directives that follow do not make any change with regard to the instructional reforms; instead, they aspire to intensify the implementation of those reforms (see the education transformation program, 2023 and the General education curriculum framework, 2020)

1.5 Significance of the Study

The significance of this study is multifaceted, delivering critical contributions across policy, theory, and practical educational leadership within Ethiopia's primary school system. By examining primary schools through the lens of organizational learning and change theories, this research provides an essential evidence base with four key areas of impact.

First, primary school in Ethiopia is understood by the government critical to a nation's development; it is thought to provide the highest public returns to investment for the state, and is the keystone for later education and economic growth (MoE, 2020). In this regard, any scientific endeavor like this one could contribute to the realization of aspirations.

Second, studies show that compared to employees from an individualistic culture, those from a collectivist culture are more likely to be committed to the process of becoming learning organizations (Bui and Baruch, 2011). Ethiopians are claimed to have a collectivist culture; thus, the study may contribute to inspire policy makers in recurrent reform initiatives to tailor curricular (instructional) reforms and professional development programs to the cultural orientation we are tagged to. Moreover, it may help to reconsider the power balance in education policy formulation process.

Third, the findings may also influence practice in primary schools and teacher training institutions sanctioned to train primary school teachers. Specifically, the result of the study may inform curriculum makers, primary school teachers, and school leaders to incorporate notions of organizational learning in designing curricula, undertaking continuous professional development activities, and in organizing and leading learning communities at school level in the same order.

Fourth, studying schools as learning organization is a new discourse which is high in the agenda; but, the reviews I have gone through informed me that the scholarly works in this regard are very scant. Thus, the study may expand the discourse by adding perspectives from a different context. Moreover, it may initiate other researchers to investigate deep into the issue.

1.6 Operational definition of terms

- Organizational learning** School-based engagement of the school community carried out to search for knowledge, store, interpret, disseminate, and retrieve knowledge about the instructional reforms so as to take actions towards continuous improvement.
- Post-1994** The time interval that starts with the endorsement of the 1994 education and training policy, and known for its rhetoric of transforming classroom practice from behaviorist to social constructivist.
- Post-1994 instructional reforms** Reforms introduced to bring a paradigm shift in teachers' classroom practice, and include active learning, continuous assessment, reflective practice, and action research.
- Primary school** The education structure that includes grades one through eight, and currently split to primary (1 to 6) and middle (7 to 8) levels.

1.7 Limitation of the study

While this study employed a rigorous multi-method approach—including systematic literature review with strict inclusion/exclusion criteria, standardized surveys adapted to the research context, and in-depth case studies using interviews and document analysis—several limitations should be acknowledged. First, the absence of direct observations of teacher learning sessions, due to security challenges caused by the prolonged war crisis in the study region, restricted my ability to capture real-time organizational learning processes in action. This gap means the findings rely on reported practices and review of documents rather than observed behaviors, which may introduce some degree of response bias.

Additionally, while the case study schools were carefully selected based on survey results to represent contrasting organizational learning profiles, their small number (n=2) limits the generalizability of qualitative findings. The reliance on self-reported survey data from 48 schools,

though valuable for identifying broad patterns, may not fully account for contextual variations across Ethiopia's diverse education landscape.

Finally, the study's focus on primary schools in one region (Amhara) during a period of significant national instability means the findings may not fully reflect conditions in more stable contexts. These limitations suggest caution when extrapolating results, while simultaneously highlighting opportunities for future research to build on this foundational work through expanded observational studies and multi-regional comparisons when conditions permit.

1.8 Organization of the study

This dissertation is structured into six interrelated chapters to systematically address the research objectives and present a coherent analysis of how selected primary and middle schools in the study area engaged with learning the post-1994 instructional reforms through the lens of change and organizational learning perspectives.

Chapter one introduces the study by outlining the research and practical gaps in understanding how schools learn and implement reforms. It also presents the rationale for the investigation, the research questions, and the significance of the study for both policy and practice in Ethiopia's education system.

Chapter two synthesizes existing literature on organizational learning and change theories, establishing the theoretical and conceptual frameworks that guide the study. It critically examines key models of organizational learning and their applicability to educational reform contexts, while also defining core concepts such as reform implementation, learning organizations, and leadership in school settings.

Chapter three details the research methodology, including the mixed-methods sequential explanatory design. It describes the systematic literature review process used to analyze eight decades of Ethiopian education reforms, the quantitative survey administered across 48 primary schools, and the in-depth case study approach applied to two selected schools. Data collection and analysis procedures are thoroughly explained.

Chapter four presents the empirical findings, integrating results from the systematic literature review, survey, and case studies. It includes a cross-case analysis comparing how the

case schools operationalized organizational learning mechanisms (OLMs) to adopt reforms like active learning and continuous assessment. Key patterns and discrepancies are highlighted.

Chapter five discusses the findings in relation to change and organizational learning theories and prior research. It explores why certain reforms succeeded or failed, how leadership and context shaped outcomes, and what the results imply for Ethiopia's reform tradition. The chapter also addresses the factors that foster or hinder the learning of post-1994 instructional reforms in the school-context.

Chapter six concludes the study by summarizing key insights, offering evidence-based recommendations for policymakers and practitioners, and proposing directions for future research. It emphasizes the need to reconceptualize schools as learning organizations to achieve sustainable reform.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

This section presents the synthesis of literature and empirical evidences on reforms/reforming, organizational learning, and determinants of learning reforms within organizational setting. In doing so, efforts have been made to tailor the synthesis to the target up on which the research focuses. Consequently, priority is given to the learning of instructional reforms in schools as organization; and to the factors that inhibit/promote the learning of these reforms in school setting. Along with synthesis of these issues, however, I deliberately include brief review of constructivism and teaching/learning in constructivist orientation because of the fact that instructional reforms introduced since the 1990s are guided by this philosophy and learning theory.

2.1 Reforming Cycle and Implementation Success in Instructional Reforms

The process of reforming is critical to the success or failure of curriculum reforms (Pietarinen et al., 2017, Fullan, 2007) and reforms specific to teaching and learning. As a result, the issue is high in the agenda of the academia; this discourse focuses on top-down, bottom-up and blended approaches to reforming curriculum. Cerna (2013) defined the top-down and bottom-up approaches to reform as follows:

Top-down processes mean that policy decisions from the national level are passed on to lower levels, whereas bottom-up processes refer to the involvement of the local level in policy-making and subsequent impact on higher levels (p.11).

The third typology blends the two approaches together to make use of capacity from the center, the grassroots level, and from stakeholders in between (Tikkanen et al, 2019; Petko et al, 2015; Kim et al, 2014; Honig, 2004; Fullan ,1994). Schools all over the globe experience either of these approaches while reforming curriculum: top-down, bottom-up or the blended one. Which approach to reform works best especially in education, is claimed to be un-theoretical (Cerna, 2013). The review in this section, therefore, focuses on synthesizing the discourse on reform approaches vis-à-vis successfulness with respect to improving classroom practice; but the

reform components I reviewed includes both curricula reforms and specifically reforms in teaching and learning per se since ‘curricula and pedagogy are inseparable’ (Hargreaves et al., 2010, p.110).

2.1.1 Top-down Approach to Reforming Instruction

This reform approach takes different names in the literature: imposed reform (Sikes, 2014), prescription (Hargreaves et al., 2010; Fullan, 2007), top-down reform (Petko, et al, 2015; Cerna, 2013), centralized reforms (Tikkanen et al, 2019), traditional reform (Robinson and Schroeder, 2014; Kretovics et al, 1991), and coercive reforms (Chin and Bennes, 1994). The unique feature inherent to all of its variants is that reform decisions are made by government bodies or policy persons working on behalf of governments (Sikes, 2014; Darling Hammond, 2012; Fullan, 2007). Government is the sole proprietor to initiate and institutionalize the reform idea, and the one which is responsible to build implementers’ capacity (Burch, 2007). The decisions are sent out to grassroots level implementers; who often lacks information and knowledge about the reform idea (Schleicher, 2018). According to Schleicher, these types of reforms little involve teachers and school leaders in the initiation, development, and tryout phase of reforming.

Thus; through top-down prescriptions, government tries to control both the content of the curriculum and the mode of delivery, which in the long run thought to enable it to control the thinking and behavior of the coming generation (Kennedy, 2007). Consequently, the approach since it lacks space for flexibility, threatens organizational learning in schools (Chrispeels et al., 2008). Prescribed approach to instructional change though good to maintain conformity and fidelity of implementation, is criticized due to the fact that it may have negative side effects inside schools such as decreased teacher motivation and possible misfit between prescribed instructional reforms and the local context (Rowan and Miller, 2007; Choi,1998)

The source from where a reform idea is initiated matters in embracing the reforms by practitioners: empirical and theoretical research works reporting success stories of top-down prescriptions are rare (Fullan, 2007 and 2011, Darling-Hammond, 2012; Bascia and Hargreaves, 2000, Henderson and Dancy, 2008; Foster-Fishman, 1999). Reforms introduced through this approach, according to Henderson and Dancy (2008), are liable to defiant behavior on the side of

implementers. In the same vein, successful reforms to Foster-Fishman, (1999) are those that are well aligned with and responsive to features of existing practice, rather than top-down changes that ignore the daily realities of teachers' work. There are various but interlinked reasons given to the futility of prescribed reforms; some of these reasons are the threat of marginalizing frontline implementers, the necessity of change in entrenched organizational values, norms and belief systems and the necessity of implementers' dissatisfied state of mind against the status quo at the time of reform initiation (ibid).

Most of the instructional reforms in the third world contain concepts adapted from developed nations (Tabulawa, 2013; Hargreaves et al., 2010) smuggled via multi-lateral organizations (Molla, 2019). Hargreaves and her colleagues' (2010) observation precisely show this reality; she noted that ideas of change in education are generated in the global North and later disseminated to the South "through international lending and donor organizations such as the World Bank" (p. 106). But policy adaptation is a complex process which at least necessitates learning the reforms, programs in the reform, and the context (Cerna, 2013). This strategy is considered as "the most prominent strategy for carrying out curricular reforms" (Pietarinen et al, 2017; Darling-Hammond, 2012).

Thus, failure stories of top-down reforms overwhelm success stories (Darling-Hammond, 2012; Fullan, 2007; Sarason, 1990). Hargreaves and her colleagues (2010), for instance, tag it the 'failed solution' to problems in education and suggest "abandoning the ingrained ideologies of bureaucratic prescription" (p.116). Similarly, researches designed to study top-down curricular reforms unveiled the limited success with respect to changing teachers' classroom practice (Desimone, 2002, Sarason, 1990). In extreme case, some researchers conclude that top-down reforms are destined to failure; Kretovics, et al (1991, p.295) have the following to say:

...the failure of the majority of school reforms stems from *the fact that they are top-down models* that remove teachers and [school] administrators...[thus], if education reform is to succeed, it must be structured to enable teachers, and school administrators to address collectively the problems that face their schools [*emphasis added*]

Specific to teaching and learning reforms, Pritchard and Woollard, (2010) posited that prescribing new ideas to pedagogical approaches by government agencies without detailed

research and theoretical underpinning is a danger to embracing the reforms as well as to classroom practice. The major reason behind the failure is too much centralized control impedes innovation and change implementation, and erodes creativity among teachers (Kennedy, 2007).

Nevertheless, there are scholars who focus more on the content and quality of leadership than the reform approach: that is, if the reform idea is congruent to teacher's previous experience and ideology, it can experience positive response; but, if the reform idea threatens what the teachers value most, it "can no longer find a match between their aims and purposes and those prevailing in schools" (Sikes, 2014, p. 41). Similarly, Morris (1995, cited in Okoth, 2016) argues that pedagogic reforms initiated following a top-down approach, can succeed if school leaders and teachers 'acquire informed understanding about the educational theory and knowledge underpinning the change' (2016, p.169). The school context also matters; a reform that aims to shift teachers' classroom practice shall consider the milieu where it is implemented (Cunningham, 2018; Schleicher, 2018; Tabulawa, 2013; Burch, 2007). Similarly, Desimone (2002) reviewed research works that compare implementation success of instructional reforms that are locally or externally initiated; the result shows externally initiated instructional reforms could have easier and faster degree of implementation since they are more specific.

What so ever, the circumstance where these reform ideas get tailored to that of teachers' ideologies and philosophies are not common. Rather, they often threaten and undermine the values and beliefs and the ways of doing things (Darling-Hammond and Wise 1985, cited in Sikes, 2014, p.43). This is because of the fact that the prescriptions are made by authorities who neither know teachers nor the context where these reforms get implemented (Schleicher, 2018; Sikes, 2014). This denies teachers autonomy and professional freedom.

Thus, if prescribed reforms contain contents which contradict teachers and school leaders' inherent philosophies and epistemic beliefs; it may create a buy-in problem (Darling-Hammond, 2012; Hargreaves et al., 2010), or force them to develop 'false clarity' (Fullan, 2007). The consequence is well observed by Sikes (2014); who noted that curricular reforms that miss this truth may lead grassroots level implementers to:

...lose their sense of meaning and direction, their 'framework of reality', their confidence that they know what to do, and consequently they experience confusion and a kind of alienation. Under such conditions their

work is likely to suffer and their commitment to decrease (p.43). [In such condition, teachers] may be reluctant to abandon tried and tested methods for new ones which they may be afraid will fail... [Or they may] practice it wrongly (p.47).

This tendency seems severe in Africa; where prescribed reforms little succeed because of the fact that politicians ignore the context because of their ambition to see things changed (Tabulawa, 2013; Cunningham, 2018). Cunningham (2018, p.4) who critically examined curricular reforms in Eastern and Southern Africa disclosed that curriculum reform in Africa, and especially of Eastern and Southern Africa seems “designed for a reality that doesn’t exist” and suggested to match implementation capacity of the host country and the capacity which the reform idea entails. However, the remedy suggested by the author appears puzzling: with all the risks of policy borrowing, the author claims, reforming curricula in Africa should benefit from the support of external agencies with teams of international experts. Lack of skills and knowledge in Ministries of Education in respective African countries to reform curriculum is the rationale behind such an exorbitant recommendation. The way out how international curricular experts who likely are alien to the African context, could bring context friendly curricular reform, has not been indicated by the author.

To conclude, reforms introduced via the top-down approach alone; albeit certain strengths related to specificity (Portal et al 1994, cited in Desimone, 2002) and capacity building (Darling-Hammond, 2012; Hargreaves et al., 2010; Fullan 2007), have noticeable limitations which can hinder their success namely: (i) these kinds of curricular reforms little consider the values, philosophies, epistemic beliefs, and experiences of grassroots level implementers into account (Schleicher 2018, Sikes 2014); (ii) ignore the school context where the reform is going to be implemented (Cunningham, 2018; Tabulawa, 2013); and defines implementation in terms of mere administration (Cerna, 2013); which in aggregate increases the likelihood of resistance on the side of implementers (Carlyon and Branson, 2018; Fullan, 2007) and consequently decrease success (Schleicher, 2018) . The adoption of any curricular or pedagogic reform rarely succeed without teachers’ cooperation; because “they can easily undermine the reform [ideas] in the implementation phase, while blaming policy makers for having attempted misguided reforms” Schleicher (2018, p.206).

This unveils that success of top-down curricular or pedagogic reforms are rare; to maximize their success, scholars strongly suggest new ways of doing reforms. Schleicher's (2018, p.207) critiques and implicit calling for new ways of reforming are worth quoting here:

Top-down governance through layers of administrative structures is no longer working. The challenge is to build on the expertise of the hundreds of thousands of teachers and tens of thousands of school leaders and to enlist them in the design of superior policies and practices. *When we fail to [genuinely] engage them in designing change, they will rarely help implement it [emphasis added].*

2.1.2 Bottom-Up Approach to Reforming Instruction

Curriculum reforming in bottom-up approach is initiated by frontline implementers (Schleicher, 2018; Robinson and Schroeder, 2014; and Cerna, 2013). Consequently, the knowledge and experiences of grassroots level practitioners matters a lot than the will of authorities in the top (Viennet and Pont, 2017). The role of authorities is limited to providing broad directions (Kim et al, 2014) leaving the specific details to the school community. Besides, this approach to reforming grants more autonomy for implementers to execute reform ideas (Kim et al, 2014). This implies instructional reforms initiated within the school setting can provide teachers' a better professional autonomy to learn the reforms.

With regard to the success stories, unlike the top-down ones, curricular reforms initiated via this approach are claimed to be more effective (Kretovics, et al, 1991), because such reforms increase participation, ownership, commitment, and motivation of teachers (Kennedy, 2007). Specially; in improving teachers' classroom practice, there are empirical evidences that show the success of this reform approach. Pietarinen and his colleagues' synthesis reveals that reform initiated via this approach "result in a better fit of teachers' needs, professional development activities, and [sense of] ownership (2017, p.4)". Moreover, advocates to this approach (Toh, 2016; Kretovics et al, 1991) claim that curricular reform based on the bottom-up approach builds autonomy that can help teachers to: provide instructional leadership, make curriculum innovation and learn the reforms in a way that can help them change their classroom practice.

Schools that exercise this reforming approach are tagged innovative schools (Glennan et al, 2004), idea driven organizations (Robinson and Schroeder 2014), and learning schools (Senge

et al., 2012) since they tap ideas from front-line practitioners; Robinson and Schroeder (2014) put the advantage of this approach over the top down reforming in the following way:

... idea-driven organizations have become very good at promoting front-line ideas, and as a result are reaching extraordinary levels of performance. Whereas traditional organizations are directed and driven from the top, idea-driven organizations are directed from the top but are *driven by ideas from the bottom* (p.xii) [emphasis in the original source].

Contrary to this view, there are pockets of evidences that question the success of pedagogy/curriculum initiatives introduced using bottom-up approach (Honig, 2004); the failure is attributed to “schools’ limited capacity to lead and afford cost of implementation, and to the weak political support” (Malen et al., 1990, cited in Honing, 2004, p.529). Weak political support, is mainly expressed in terms of the reluctance of policy makers in supporting schools’ decision making. The reluctance is because of the fact that the reform approach is incompatible with the philosophy of public policy-making institutions, who often favors the traditional approach (Darling-Hammond, 2012; Honig, 2004). Sarason (1990) describes this incompatibility in terms of power relationships between the top and the bottom_ unwillingness of the former to minimize the power distance with the latter. The feeble control and overemphasized autonomy of the bottom is another weakness attached to this approach (Cerna, 2013) since pressure and reward need to be balanced for successful adoption of the reform initiatives (Fullan, 2007, 2006, and 1994), loose control and extended autonomy may hinder successful implementation. So as to delineate policy makers’ role in bottom-up reforms; Honig (2004) suggested to apply organizational learning. But the author’s view seems incompatible to traditional roles of policy makers, which inherently focus on standardization, convergence of practice and benchmarking.

To conclude, the bottom-up reform approach alike its opposite twin has limitations; that is, bottom-up approach rarely works without backing from government (Petko et al, 2015) and top-down approach little succeed without buy-in from school community (Darling-Hammond, 2012; Hargreaves et al., 2010, Fullan 2007). Moreover, neither the top-down nor bottom-up reforming alone succeed because the interest of each differs; while policy makers focus on political, economic and social goal of the reforms, school practitioners emphasize on individual

classrooms (Mutch,¹¹ 2012). Such irreconcilable views resulted in gaps with respect to understanding the reform ideas. This gap can be narrowed only if both can see schools as open systems (Yang et al, 2004) and focus on the bigger picture instead of the parts (Stoll and Kools, 2017).

Thus, collaboration and partnership between the top and the bottom appears mandatory if a given curricular reform is to succeed: in this case the top can provide support in the form of funding and capacity building (Pietarinen et al, 2017; Honing, 2004), while the bottom can enrich reform ideas from the top through deliberation (Viennet and Pont, 2017). This makes blending the approaches together important while reforming curricula and pedagogy; because, according to Watson and Fullan (2013) “the issue is not choosing between two contradictory approaches, but rather developing a simultaneous top-down, bottom-up strategy” (p. 234).

2.1.3 The Blended Approach to Instructional Reform

Independent use of top-down or bottom-up approach failed to affect schools’ core function; that is, teaching and learning (Fullan, 2007; Morris and Scott, 2003). When the two approaches independently applied to reforming pedagogy/curriculum, the role played by school community is different; according to Leana, (2011) and Lieberman and Pointer Mace (2008) cited in Pietarinen et al (2017), top-down reforms limits schools to mere implementers and recipients of prescriptions; whereas, in bottom-up approach, the school community depends on learning and innovation capacity of its members. However, the discourse on curriculum reform seems evolving; that is, instead of overusing either approach, blending the two is proved to be more effective. This is because of the fact that this approach more than other approaches, increases communication between policy persons, implementers, and stakeholders who in one way or another, influence implementation (Morris and Scott, 2003). As a result, maintaining top-down-bottom-up balance is advocated for successful accommodation of instructional reforms in schools (Viennet and Pont, 2017; Pietarinen et al, 2017; Cerna, 2013; Hargreaves et al., 2010; Fullan, 2007 and 1994).

Fullan, one of the gurus in educational reform argues that “neither top-down nor bottom-up strategies for educational reform works. What is required is a more sophisticated blend of the

¹¹ Mutch (2012); Curriculum Change and Teacher Resistance, Curriculum Matters 8

two” (1994, p.1) since this approach utilizes strengths of the two approaches (Cerna, 2013). Specifically, the blended approach has more likelihood of success, because it:

...utilizes both the state level capacity to provide framework and direction, resources, and bring together broad networks, and the local-level stakeholders’ capacity to learn, create, respond to, and feed into overall directions (Fullan 1994 cited in Pietarinen et al 2017, p.4).

Thus, since this approach facilitates collective sense making (Pietarinen et al, 2017), it can help for effective accommodation of educational reforms through interaction of individuals and organizations; which according to Burch (2007) “transform the meaning of policy and create new tools and frames; frames that are incorporated into new policies and the institutions created to support them” (p.85). Similarly, Cerna (2013) who synthesizes literature on reforms positioned that combining the two approaches can help to “benefit from the strengths of both approaches and enable different levels to interact regularly.” (p.19). In the blended approach to reforming, there is genuine participation of partners from the top and the bottom, and this is strongly suggested in Schwab’s curricular concept of deliberation (2013)¹².

Research results conducted so far shows success stories of curricular reforms initiated via this approach; a cross sectional study in Finland, for instance, reported successful implementation of a curriculum reform (Pietarinen et al, 2017). This success, according to the same authors is attributed to the implementation strategy, which gives due regard for knowledge sharing and change management in the sense that it:

...engages those who are involved, and who are affected by the curriculum reform, appreciates the expertise of the participants and different interest groups, values contradictory views, and exercises transparent and participatory leadership in steering the curriculum reform (2016, p.14).

Similar researches designed to examine the success of the blended approach reported minimal level of stress associated to curricular reform implementation, maximum collaboration among school community, and new pedagogical practices by teachers (Tikkanen et al, 2019). A large-scale survey designed to examine the success of digital media adoption in schools

¹² Schwab, J. (2013). The practical: A Language for Curriculum. *Journal of Curriculum Studies*, 45(5), 591-621, Routledge, Tyler and Francis Group.

categorized reforms into four typologies: (i) a blend of bottom-up and top-down, (ii) top-down development with no bottom-up support, (iii) bottom-up development without top-down support, and (iv) optional development with neither strong bottom-up nor top-down initiatives- and found the blended approach was successful in properly adopting ICT into teachers' classrooms (Petko et al, 2015).

Countries in their respective curriculum set national standards they aspire to meet in education; but success in implementation differs. Surprised by the PISA score their teenagers received, Germany and the USA have set such standards; while Germany succeed to meet these standards; the USA didn't (Schleicher, 2018). The same author noted that stakeholder deliberation in the development, trial and implementation of the standards was more in Germany than in the USA. Besides, the government in Germany supplied adequate and relevant resources that can help schools to implement the standards in classrooms; which become the secret behind the success in Germany. This implies blending top-down and bottom-up reform approaches while reforming curricula is more successful since such approach build consensus and trust between the top and the bottom (Schleicher, 2018). This finding seems consistent since there are similar results in sectors outside of education; for instance, Kim and his colleagues (2014) who studied 59 top-down and 52 bottom-up reforms in the business sector found that a reform will be successful if the two approaches play complementary roles.

On the other hand, there are arguments that value other variables instead of the reform approach. For instance, Porter, (1989, cited in Desimone, 2002, p.442) asserts that success in reform implementation depends on the quality of teachers where "excellent teachers need autonomy to thrive, average teachers need a balance of specificity and autonomy, and weaker teachers benefit from very specific guidelines". This means that, other things kept constant, excellent teachers successfully learn and then implement bottom-up instructional reforms, weaker teachers do top-down ones, and average teachers implement instructional reforms initiated via the blended modality.

Some change theorists also claim that the assumption seized by reformers about teaching and teachers at the time of reforming is more influential than the reform approach in determining the success or failure of instructional reforms (Bascia and Hargreaves, 2000). According to these authors, there are four different conceptions of teaching and teachers that may guide reforms in

teaching: technical¹³, intellectual¹⁴, socio-emotional¹⁵, and socio-political¹⁶. When instructional reform is guided by mere technical conception of teaching and teachers, the same authors assert, success is rarely attained except in instructional reforms that aim to master simple learning outcomes. On the contrary, reform guided by the intellectual, socio-emotional, and socio-political conception of teaching and teachers, could meet implementation success. However, with respect to socio-political conception of teaching and teachers, if government exercises power over teachers, professional powerlessness will happen (Blase and Anderson, 1995; cited in Bascia and Hargreaves, 2000), and that would lead to failure of reforms in teaching and learning. This implies the wider is the power distance between teachers and government, the lesser will be the successfulness of the change; but the closer it becomes, the more successful will be the learning and consequent implementation of the reforms. Thus, classroom practice is “an intellectual, socio-emotional and socio-political as well as a technical enterprise” (Bascia and Hargreaves, 2000, p.18)

A policy attribute theory (Portal et al, 1994; cited in Desimone, 2002) has similar critical view of reforms; it states that for successful reform implementation, the reform should have the following unique qualities: be detailed and extensive (specificity), coherent with other reforms (consistency), supported by law, social norms or expert knowledge (authority), tied to the rewards and sanctions (power), and resistance to turbulent alteration (stability). Thus “the higher a reform is in one or all of the attributes, the greater the chance of its successful implementation” (Portal et al, 1994; cited in Desimone 2002, p. 439). But, authority is claimed to be more effective than power to persuade school community in institutionalizing reform elements. According to this theory, there are three types of authorities: normative authority, individual authority, and institutional authority (Desimone, 2002), which in the same order help teachers, principals, and institutions to buy-in and take ownership of the reform ideas.

However, balancing authority and power means balancing top-down and bottom-up approaches in a manner that addresses the interest of each party. Similar balancing is given by

¹³ Reform that conceives teaching as following the detailed pedagogical and assessment procedures stipulated in policy directives formulated based on scientific evidence or reformers’ common sense

¹⁴ Reform emphasizing cognitive standards, content knowledge, intellectual mastery, deliberative judgment, rational planning, critical reflection and systematic problem solving

¹⁵ Reform emphasizing self-awareness, self-regulation, motivation and other social skills such as interactive skills

¹⁶ Reform that gives due emphasis for shared decision making between government and school level implementers

Fullan (2007, 2006 and 1994) and this balance is between reward and positive pressure. Thus, instructional reforms which blend bottom-up and top-down approach to reform or which balance reward and positive pressure can be easily learnt and succeed in changing teachers' classroom practice (Desimone, 2002; Fullan, 1994).

To conclude, the fair mix of top-down and bottom-up approaches to reforming instruction resulted in more successful implementation; in such an approach to reforming, the participation of schools and teachers is prominent, and this develops sense of ownership and buy-in by grassroots level implementers. On the other hand, it gives the top authority power to decide on the sanctions and motivation schemes while schools and teachers implement the reforms (Schleicher, 2018; Desimone, 2002; Sarason, 1990). But when this power balance is violated, reform implementation will get threatened. Desimone (2002) noted that reforms:

...with authority work through persuasion [where] teachers see the reform as part of a professional norm, or endorsed by an expert or charismatic leader, and they are persuaded that the [reform] is worth supporting. In contrast, [reforms] with power work through force. The rewards or sanctions tied to policies are the motivating factors when power is the operating policy attribute (p.462). [And if comparison is needed, reforms] had lasting effects through authority, not power (p.463).

Dalin and colleagues (1994) who studied educational reforms in Colombia, Bangladesh, and Ethiopia also concluded, reforms could be effectively implemented 'when there is a sense of ownership by those who are expected to practice the change'. Fundamentally, schools improve when systemic change is seen as a learning process and respected as such, just as learners learn under the same conditions.

2.2 Phases of Reforming Curriculum and Pedagogy

The synthesis in section 4.2 shows how the approach to reforming curricula and pedagogy promote or hinder the accommodation of the reforms. In this section, I tried to show each phase vis-à-vis success or failure in implementation. Moreover, variables inherent to the reform that potentially affect implementation were discussed.

According to Fullan, reform process has three interlinked phases: initiation, implementation, and institutionalization (2007, pp.65-106). Initiation is the phase when adoption

by an authority or a state is made to introduce a reform. This phase is characterized by extended periods of data collection, debate, and analysis (Honig, 2004) so that a reform could be accommodated by schools and succeed in implementation. This phase is decisive to determine success or failure of a reform: as Hargreaves and her associates observed “seeds travel better than ripened fruit” (2010, p.115); to mean that deliberation with stakeholders at policy initiation phase is more effective than validation of the policy at the end. Little consideration to deliberation in this phase may lead to teacher marginalization-the missing of teachers’ perspective- that profoundly affects reform learning and implementation. The missing of teachers’ perspective causes a sense of powerlessness on teachers (Bailey, 2000). A study conducted by Bailey in Canadian primary schools on teachers’ response towards a change initiative on student-centered learning reveals that teachers were more concerned about de-professionalization process of change than the content of the reform itself. Bailey (2000), informed by the works of different scholars (e.g., Huberman 1993, Ball 1987, Cooper 1988, Schlechty 1988, and Clune 1990) has put his observation as follow:

Substantive curricular change only occurs when it begins with the teacher and is fundamentally concerned with the immediate needs of children, in a school climate open to problem solving rather than stifled by a hierarchically organized structure (p.113).

Reform initiation is affected by myriads of factors such as innovation quality, access to innovation, advocacy from central administration as well as from teachers, external change agents, community pressure, funds available to support the innovation and orientation while initiating the innovation (Fullan, 2007).

Innovation quality refers to a distinctive characteristic of an innovation (Haner, 2002); in the context of instructional reforms, the distinctiveness is tied to quality and clarity of the reform (Fullan, 2007). Access to information is related to diffusion of information about the innovation to stakeholders via workshops, teacher social networks/professional networks (Coburn, Kaufman, Stein, 2012), and other ways. It depends on communication infrastructure in the scene where innovation adoption is made; such as infrastructure and resources. Advocacy from school/district authorities and teachers refer to support given to the new innovation idea in leading and implementing respectively. Establishing professional learning communities around the innovation idea, according to Fullan (2007) is critical for securing teacher advocacy.

External change agents are those functioning at state or national level, and support provided from these bodies at the time of initiating the innovation affects its fate of implementation. New policy and funds are other factors to influence initiation; that is supporting the innovation idea by useful strategies and adequate source of fund positively influence initiation. Orientation of the reformers while introducing the innovation is another variable influencing initiation; accordingly, if the orientation to adopt reform is bureaucratic, the political value is more important than its educational value. On the contrary, if the orientation to adopt a reform is problem solving, the educational merit especially in changing classroom practice is more valued. But, adopting reforms based on the latter orientation according to Fullan (2007) is rare. Depending on the influence of the above-mentioned factors, “the process of initiation can generate meaning or confusion, commitment or alienation, or simply ignorance on the part of participants and others affected by the change” (Fullan, 2007, p.82)

With regard to implementation and institutionalization, if a reform is initiated without careful examination of priority areas, implementers may not see the need for an advocated change. According to Fullan (2007), the underlying reasons for reactive response from the side of implementers; the change may overload them, the importance of a new change may not be clear at the beginning, the felt need may be obscured by other factors such as complexity, practicality, and clarity of the reform. But, rewarding initial success can help implementers to develop need towards the reform.

Clarity is a detail about what teachers should do differently, so that they identify the essential features of the reform; according to Fullan (2007), the more complex the reform is the greater will be the problem of clarity. When reforms lack clarity on the side of implementers, reforms will be exposed for a threat called false clarity: a syndrome that occurs when implementers interpret the reform idea in an oversimplified way lesser than what has been intended by the reformers. For those who are trying to embrace the reform sincerely, clarity problem may cause anxiety and frustration (Tikkanen et al, 2019).

Complexity to Fullan (2007, p.90) is “the difficulty and extent of change required of the individuals responsible for implementation.” It is about the difficulty of practicing the reform idea, the change in skills, beliefs and strategies, and the materials required to implement the change. The more demanding these alternations are, the higher is the complexity of the reform

idea. On the contrary, simple changes though easier to carryout seldom make difference in the way of doing things. Thus, according to Fullan (2007, p.91) complex changes though demanding can “promise to accomplish more.”

Practicality or quality is about availability of materials and other resources necessary to implement the new reform idea. When the reform idea has more bureaucratic purpose than problem solving mission, the quality or practicality of reform is threatened. While stating this scenario, Fullan (2005, p.91) writes “when adoption is more important than implementation, decisions are frequently made without the preparation time necessary to generate adequate materials”.

In sum, educational reforms especially those related to classroom practice will have high degree of success if: (i) the reform idea is within the priority area of implementers (need), (ii) its details are understandable to them, (iii) the reform is neither too simple nor too difficult to implement (complexity), and (iv), the required resources and materials are made available at the time of the adoption decision (practicality/quality).

2.3 Learning Organization: Disclosing existing Discourse

2.3.1 Meaning and Nature of Learning Organization

It seems difficult to get single accepted definition for learning organization since there are different perspectives that explains the concept: Wai-Yin Lo (2004) provide us three perspectives to define learning organization: (i) learning to learn perspective that focuses on problem solving; (ii) knowledge perspective that emphasizes generation, transfer, and integration of knowledge and information and; (iii) change perspective that gives overwhelming focus to improving and transforming an organization in order to adapt to the changing environment.

Thus, a Learning Organization (LO) is an organization whose entire members learn continuously, and as a result of the learning, transforms itself to adapt to the changing environment (Rowley 1998, cited in Can, 2010, Pedler et al 1989, cited in Stoll and Kools, 2017).

Schlechty (2009) contrasted LOs to bureaucratic organizations and noted that LOs are highly adaptive and creative where knowledge creation and knowledge application are primary

modes of operation. But, Peter Senge (1990, p.3), the author of the most widely cited book in organizational learning discourse, defines LOs as:

organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together.

The learning process that aims to transform the organization to an adaptive entity is termed as Organizational Learning (Mumford, 2000; Murray, 2002). This learning takes place at different levels: individual, team and organizational (Argyris and Schon, 1978; Crossan et al 1999; Marquardt, 2002; Scott, 2011).

Since the publication of the fifth discipline (Senge, 1990), plethora of empirical studies and literature review have been produced on LO and OL, especially in the field of management science (Stoll and Kools, 2017; Schlechty, 2009; Odor and Samuel, 2018)). Since then, there is a growing body of literature on the necessity of creating a LO for organizational sustainability (Senge et al., 2012; Huber, 1991). Nevertheless, alike its meaning, there is no conceptual clarity on the ‘who’, ‘what’ and ‘how’ of the presumed OL, which refer to the agency, outcome, and process of learning respectively (Stoll and Kools, 2017; Scott, 2011; Murray, 2002; Fiol and Lyles, 1985).

With regard to the agency of learning, the existing discourse portrays OL as: (i) learning which is exactly similar to human beings or (ii) metaphorical expression for learning undertaken by individuals in team and independently. Those who thought OL as if it is exactly alike to that of human beings claim that organizations have memory so that they search for, store in, interpret, disseminate, and retrieve information (Kolb, 1984; Huber, 1991; Walsh and Ungson, 1991). On the other hand, the metaphorists assert that individuals are learning entities for OL (Argyris and Schon 1978, Senge, 1990 and 2012; Wellman, 2009; Scott, 2011); that is, individuals are learning agents that collectively represent organizational learning (Law and Chuah, 2015; Rait, 1995, cited in Collinson et al, 2006).

Nevertheless, both claim that OL is neither mere collection of individual’s learning nor learning that can be strewn to individual members (Fiol and Lyles, 1985; Leithwood, et al, 1998). Rather, there are puzzles in it; that is, organizations may not necessarily be a LO while its

members are learning (Argyris and Schon, 1978; Senge et al., 2012); that is, for an organization to be a LO, its members need to share and buy-in the learning within each other (Senge et al., 2012). On the other hand, an organization may be a LO while its members aren't (Leavitt, 2011). Such kinds of organizations employ exploration (using knowledge from outside the organization) instead of exploiting internal capacities (March, 1991). But, there is consensus that OL exceeds the sum of individual learning if both an organization and its members are learning (Senge 1990 and 2012, Argyris and Schon 1978). This is well understood as follows even in early discourses of the concept:

Organizational learning occurs through individuals, [but] it would be a mistake to conclude that organizational learning is nothing but the cumulative result of their members' learning. Organizations do not have brains, but they have cognitive systems and memories. As individuals develop their personalities, personal habits, and beliefs over time, organizations develop world views and ideologies. Members come and go, and leadership changes, but organizations' memories preserve certain behaviors, mental maps, norms, and values over time (Hedberg, 1981 quoted in Fiol and Lyles, 1985, p.804).

The contest on the 'what' of learning, or the outcome produced by the process of OL also continues active. Some scholars claim that OL is change in behavior (Nevis et al, 1995). This view focuses on detection and correction of errors via single-loop learning (Argyris and Schon, 1978) or through exploitation of existing knowledge (March, 1991). Others consider it as if it is change in cognition (Kolb, 1984; Huber, 1991; Walsh and Ungson, 1991). This view emphasizes on organizational memory. Walsh and Ungson 1991), posited six different locations where organizational information is frequently stored: individual memory, cultural norms and practices, procedures, roles, artifacts, and external archives. The third variant focus on both (Senge et al., 2012, Senge, 1990, Fiol and Lyles, 1985) indicating that change in behavior and cognition are outcomes of OL. The third view, thus, underscores on knowledge and understanding for improving actions (Fiol and Lyles, 1985, p.803). This shows that there is little consensus regarding the meaning and its basic nature (Huber, 1991; Kim et al., 2014; Jamali and Sidani, 2008; Collinson et al 2006; Crossan et al., 1999, Leavitt, 2011).

In spite of the diverse interpretation lingering around the concept; there are commonalities in the running discourse. Collinson et al (2006) for instance, synthesized the

works of different scholars (e.g. Crossan, et al, 1999; Rait, 1995; and Shrivastava 1983) and provided five common assumptions often used to conceptualize OL: (i) it is multilevel that takes place at the individual, group, and organizational level; (ii) it includes inquiry to detect errors or to uncover taken-for-granted assumptions; (iii) it relies on shared understandings among members; (iv) it involves behavioral and cognitive change; and (v) it includes embedding new knowledge and practices in organizational routines. Similar synthesis undertaken by Stoll and Kools (2017) have identified the following common features: (i) It is thought to be necessary and suitable for any organization which has to secure sustainable competitive advantage; (ii) It is portrayed as a multilevel concept interpreted in terms of individual behaviors, team, organization, and organizational practices and culture; (iii) the ability of practitioners' learning to learn' is pivotal in affecting practitioners' beliefs, values and norms; and (iv) learning through inquiry, problem solving, and experimentation by individuals, teams, and an organization are key drivers of change and innovation. Moreover, the potential of OL in leveraging organizational improvement is widely accepted. Besides; there is consensus that becoming an effective learning organization is not an easy task to accomplish; rather it is incremental, painful, and slow (Dymock, 2003). Because, it requires much learning, unlearning and relearning to remodel long-held assumptions and adapt to a changing environment (Jamali and Sidani, 2008; Fiol and Lyles, 1985).

2.3.2 Organizational Learning in School Context

Since the last two decades, the concept is adopted to study educational phenomena (Austin and Harkins, 2008); consequently, un-intermittent empirical studies conducted at different spots of the globe (Senge et al, 2000 and 2012; Silins et al, 2002; Park, 2006, Collinson et al, 2006; Can, 2010, Hora and Hunter, 2013; Stoll and Kools, 2017; Tan, 2019). These studies show the possibility of designing schools into learning organization (SLO). Senge et al. (2012, p.3) described a learning school as schools that are “made sustainably vital and creative by adopting a learning orientation; [that is] by involving everyone in the system in expressing their aspirations, building their awareness, and developing their capabilities together.”

The interest to redesign schools into learning organization emerges from the limitations of the ‘factory model’ to schools and schooling; about which different scholars seem disappointed. Darling-Hammond (2012) and Stoll and Kools (2017), for instance, argue that

existing school systems fall short of realizing its mission of preparing the young generation to live and function in an uncertain world. The school realities that represent the limitations are the education sector rarely innovates itself, teachers lacked the professional ability needed to prepare the generation, and most importantly educational reforms that aimed to improve classroom practice failed to bring lasting change (Fullan, 2015; Stoll and Kools, 2017). This shows the initiative to adapt OL into school context emerges as a result of the widening gap between expectation and reality. In particular, consistent failure in implementing educational reforms has created a fertile ground for SLO to evolve (Silins, et al 2002; Stoll and Kools, 2017) as a strategy of reversing failure stories.

Adoption of LO into the school setting is, therefore, an emerging trend that aims to help school systems be knowledge workers (Schleicher, 2011, 2018) and to enable them meet the challenges of successive educational reforms (Senge et al, 2012; Fullan, 2007). Efficacy of the concept in a school setting is described by Stoll and Kools (2017) as follows:

SLOs have been seen as the ideal type of organization for dealing with the changing external environment, for facilitating organizational change and innovation, and even [for] improve[ing] students' learning and other outcomes (p.2) [that] is viewed as suitable to any school organization regardless of context (p.7)

In the same vein Collinson et al (2006, p.109) noted that schools as Learning Organization (SLO) is considered as a strategy to “change and an opportunity for continuous renewal from within... a deliberate learning, for school level implementation of changes.” Silins et al (2002) also observe the potential of SLOs to put new learning in place since such schools have “systems and structures that enable [teachers] to collaboratively and continuously learn” (p.616). Moreover, some scholars have operationalized the concept into measurement tools that helps to gauge OL in school context (Park, 2006; Panagiotopoulos et al., 2018)

2.4 Learning entities

OL is a multi-level action that takes place by three learning entities: individual, team and organizational (Argyris and Schon, 1978; Senge, 1990; Crossan et al 1999; Marquardt, 2002; Scott 2011; Stoll and Kools, 2017). Any reform introduced/initiated into/in schools will make a difference only if change takes place at all the three levels (Senge et al, 2012). It has three

processes undertaken by these levels; According to Crossan et al (1999, pp.524-525); the learning entities employ different learning process; consequently, “intuiting and interpreting occur at the individual level, interpreting and integrating occur at the group level, and integrating and institutionalizing occur at the organizational level.” They described as follows:

Intuition is the preconscious recognition inherent in a personal stream of experience, which can affect others via the individual’s interaction with others. Interpreting is the explaining of an insight or idea to one's self and to others using preverbal and verbal language. Integrating is the process of developing shared understanding among individuals and of taking coordinated action through mutual adjustment by using dialogue and joint action. Institutionalizing is the process of embedding learning that has occurred by individuals and groups into the organization, and it includes systems, structures, procedures, and strategy (p.525).

Learning at individual level refers to the changes that take place within the individual in skills, insights, knowledge, attitudes, and values acquired by using strategies like self-study, technology-based instruction, and observation” (Marquardt, 2002). Learning at this level ultimately counts for changing classrooms, and it is the *sine qua non* of success in large-scale educational reforms (Fullan, 2007; Darling-Hammond, 2012; Hargreaves 2004). Unless each and every teacher is learning every day; teaching can’t be a high-quality profession (Fullan et al., 2006; Nina and Hargreaves, 2000). Nevertheless, though individual learning is thought as a building block to team and organizational learning (Fauske and Raybould, 2005), OL is different from the arithmetic sum of the learning of its members (Crossan et al, 1999). It is a dynamic and interactive process established between individual and organizational learning, and exploitative and explorative learning (Crossan et al, 1999).

Learning at this level could be quickened or delayed depending on certain factors; for example, Fullan (2007) observes that teachers are willing to adopt change at the individual classroom given that an innovation is clear and practical, the leadership is supportive, opportunity to interact with other teachers is available, advocacy from teacher union, and outside resource is helpful. But lack of access to adequate information, time, resilience and synergy limits the likelihood of learning at this level. It also depends on the level of dissatisfaction teachers experience in the way they carry out their professional duties; that is, the more intense is this dissatisfaction, the higher will be the likelihood of learning new reforms (ibid). School culture is also the most important factor to facilitate or prohibit learning at individual level.

According to Fullan (2007) attracting and training better teachers is secondary to changing the cultures within which they work.

With regard to teams as learning agencies; there are couples of words and phrases which scholars' coin to describe teachers' group-based workplace learning. Community of practice (Wenger, 1998), Professional Learning Communities, PLCs (Hargreaves et al., 2010), Teacher Learning Community, TLC (McLaughlin and Talbert, 2006), and development army in Ethiopia are often used. Though these taxonomies slightly differ in meaning with each other, they all refer to workplace learning undertaken by team of teachers at intra or inter group level.

Professional learning communities (PLCs) or communities of practice, for example, is claimed to be the founding block for SLO; according to McLaughlin and Talbert (2006, Pp.5-8) they: a) build and manage knowledge; b) create shared language and standards for practice and student outcomes; and c) sustain aspects of their school culture vital to continued, consistent norms and instructional practice. Nevertheless, developing PLCs of teachers demand change in norms, values and culture (Fullan, 2007; McLaughlin and Talbert, 2006) or undertaking double-loop learning (Argyris and Schon, 1978), which is not easily affordable to achieve.

McLaughlin and Talbert (2006) also noted on how a teacher learning community functions best: they claimed that, teachers learn best in a school-based teacher learning community when they are involved in activities that: (a) focus on instruction and student learning specific to the settings in which they teach; (b) are sustained and continuous, rather than episodic; (c) provide opportunities for teachers to collaborate with colleagues inside and outside the school; (d) reflect teachers' influence about what and how they learn; and (e) help teachers develop theoretical understanding of the skills and knowledge they need to learn (p.9). Learning at this level connects learning that takes place at individual and school level (Senge et al., 2012).

Concerning school level learning, the discourse portrays school itself as learning entity vs learning school as metaphorical expression coined to represent collective learning of individuals within the school. The metaphorists argue that schools learn from the collective experience, perspectives and capabilities of individuals who staffed the school (Senge et al., 2012; Scott, 2011; Wellman, 2009; Rait 1995; and Argyris and Schon, 1978). On the contrary, those who consider schools as learning entities (eg, Huber, 1991; Walsh and Ungson, 1991; and Kolb, 1984)

positioned that schools like human beings employ information search mechanisms, have storage sites to store the information, apply strategies to interpret the information, and use unique strategies for retrieving and disseminating the information.

What so ever, unlike traditional schools which have defensive mind set to “defend their traditional ways of doing things” (Senge, 2006, p.26), learning schools encourage innovation and question existing values and norms.

Schools may provide seasonal in-house trainings, organize group meetings, arrange reading hours, take off-job trainings to improve teachers’ classroom practice along the constructivist perspective; but these activities of schools do not fit the requirements of a learning school (Knight et al, 2015; Can, 2010). This is because such routines are learning in organizations, but not all about OL (Hara 2009). According to Bui and Baruch (2011), OL “is not a program, but rather a process for understanding and learning together (p.2).” Moreover, learning is an aspect of all activity not a type of activity (Lave and Wenger, 1991; cited in Laffey et al. 2002). In schools which are built as a LO, there are distinctive and critical professional features: there are shared values and norms; and they focus on student learning, reflective dialogue, de-privatization of practice and collaboration (Louis, Marks et al, 1996; cited in Scribner et al 1999). Besides, a learning school works to “accelerate individual learning, redefine organizational structure, culture, mental models, and encourage the participation of all members” (Panagiotopoulos et al, 2018, p.2).

Building SLOs has positive contribution both to staff and students (Silins et al 2002; Stoll and Kools, 2017). With regard to students, its effect goes beyond improving students’ academic performance; according to Silins et al (2002), it improves ethical values, self-esteem, students’ ability to self-directed learning and personal development, their wellbeing or happiness. Similarly, SLO has positive impact for teachers and school leaders such as greater individual and collective understanding, improved skills and practices, more commitment to work, feeling of professionalism and growing ability to learn, and willingness to work with colleagues and to share practice (Stoll and Kools, 2017).

Thus, OL in school setting can be operationalized as a deliberate multilevel learning that is undertaken continuously to implement educational changes initiated from within and from

external sources. The more schools become built into a LO, the higher will be the change on teachers' classroom practice and students' intellectual, social and moral dimensions (Stoll and Kools, 2017, Rosenholtz, 1989; cited in Colinson et al, 2006).

With respect to pedagogy; compared to bureaucratic ones, “schools that are organized as learning organizations are much more likely to be supportive of the kinds of pedagogical styles that result in greater creativity, problem - solving ability, and other so - called twenty -first - century skills (Schlechty,2009, p.46)”

2.5 Unique features of a Learning Organization

The LO concept is interpreted differently so does the features that characterize a learning organization (Huber, 1991; Mumford, 2000; Jamali and Sidani, 2008). Watkins and Marwick (1996) identified seven features that differentiate a LO from traditional organizations: in organizations that are built into an LO; there are continuous learning, inquiry and dialogue, team learning, embedded system, empowerment, system connection and strategic leadership. Stoll and Kools (2017) adapted these dimension into a school setting; accordingly, learning schools are those which: (i) develop and share a vision centered on the learning of *all* students; (ii) create and support continuous learning opportunities for all staff; (iii) promote team learning and collaboration among staff; (iv) establish a culture of inquiry, innovation and exploration; (v) embed systems for collecting and exchanging knowledge and learning; (vi) learn with and from the external environment and larger learning system; and; (vii) model and grow learning leadership. The authors argue that successful implementation of the seven dimensions is greater than the sum of the parts. Though the dimensions are developed for school context, these authors focus only on the action dimension of a LO.

Similarly, a study conducted in Australian secondary schools by Silins, et al (2002, p.634) defined OL in terms of the following constructs: they reported that schools become LOs when (i)staff openly communicates with each and actively seek information to improve their work, (ii) leaders install to reward initiative and experimentation, (iii) teachers are actively involved in activities such as school policy formulation, review of current practices, establishing future directions, and sharing information with parents and the community, and (iv) staff are looking out for opportunities to increase knowledge and skills and are provided with sufficient resources

and time to develop professionally. Moreover, synthesizing the existing body of literature Can (2010) has identified features that characterize SLOs; these include environmental scanning, vision and goals, collaboration, taking initiatives and risks, review, recognition and reinforcement and continuing professional development.

Schlechty (2009,) employed a different approach to differentiate a learning school from bureaucratic ones; the features portrayed below are adapted from his perspective (Pp.42-44).

Bureaucratic schools

- The willingness and ability of students to comply with uniform performance standards set by various end users are usually of central concern. Student docility and compliance are defined as virtues.
- Teachers are customarily viewed as employees and as lower – level members of the adult hierarchy.
- The principal is usually viewed as a first - line supervisor, in the lower echelon of management
- Routine, standardization, and predictability of response are desired end states
- Rules, procedures, and policies are elaborate and rigidly enforced
- Communication flows from the top down with little attention to bottom - up communication or horizontal communication. Management by memorandum is typical.
- Coordination of effort is a management function

Learning Schools

- A well - articulated set of norms places task engagement and profound learning at the center of the school' s system of values and clearly defines the core business of school as the creation of engaging work for students
- Teachers are viewed as leaders, designers of work for students, and guides to instruction.
- The principal is expected to be a leader of leaders within the school, as well as a member of the superintendent ' s administrative team at the central office level
- The idea of continuous innovation aimed at continuous improvement is embraced as a core value, and behavior is guided by clear moral and aesthetic norms combined with a fluid set of technical norms.
- Local conventions place emphasis on fairness, equity, excellence, loyalty, courage, persistence, constancy of purpose, and duty as values that define the way we do business around here.
- Conversation and dialogue about the core business of the school and its success in doing that business are
- the primary tools for building and maintaining the school culture and ensuring the disciplined pursuit of a shared vision of the future

Peter Senge (1990 and 2012) in turn characterize schools that learn as those that: (i) accomplish personal mastery, (ii) develop mental models that enhance OL, (iii) build shared vision, (iv) install a culture of working in teams, and (v) develop systems thinking. Laffey et al. (2002, p.112) described these constructs/building blocks in the following way:

- (i) Personal Mastery- personal empowerment through the identification and realization of a personal vision; (ii)Mental Models - processes of reflection and

inquiry that make tacit knowledge visible and shared; (iii) Shared Vision - establishing and nourishing a common purpose; (iv) Team Learning - enabling teams to think, learn, and mobilize for change (motivated by a commitment to a shared vision); and (v) Systems Thinking - ways of thinking in which understanding interdependency and “change processes” lead to appropriate solutions to complex problems.

2.6 Constructivism, constructivist view of learning, and post-1994 instructional reforms

Concepts like constructivism, knowledge construction, and constructivists came into the psychological lexicon beginning from the second half of the twentieth century (Mahoney, 2005 cited in Pritchard and Woollard, 2010), albeit the idea is as old as early philosophy. Constructivism is both a philosophical thought and a learning theory as well (Pritchard and Woollard, 2010). As a philosophical thought, constructivism is meant to “investigate the scope, structure, and very nature of knowledge [construction] (p.3). This construction is undertaken either individually or collectively by consensus. The construction/reconstruction focuses on forming meanings which are liable to change when the created meaning is found to be “incomplete, faulty, or malformed” (Lincoln et al, 2018, p.220). Thus, the underlying philosophical assumption of constructivism underscores on the absence of objective reality to transmit to students (Pritchard and Woollard, 2010). Lincoln et al. (2018, p.216) describe the philosophical intent of constructivism in the following below.

Table 2.1: Philosophical intent of constructivism

Ontology	Relativism-local and specific constructed and co-constructed realities
Epistemology	Transactional/subjectivist, created findings
Methodology	Hermeneutical/ dialectical
Inquiry aim	Understanding, reconstruction
Nature of knowledge	Individual or collective reconstructions coalescing around consensus
Knowledge accumulation	More informed and sophisticated reconstructions; vicarious experience
Goodness or quality criteria	Trustworthiness and authenticity including catalyst for action
Values	Included-formative
Ethics	Intrinsic, process tilt toward revelation, special problems
Voice	Passionate participant as facilitator of multi-voice reconstruction

Constructivism as a theory of learning claims that no knowledge is assumed to be powerful knowledge which is worth of learning; rather worthiness depends on the views of the

constructor. This is because of absence of an orthodox way to co-construct the world (Schunk, 2012). Its theoretical assumptions are well described by Cobb and Bowers (1999, cited in Schunk, 2012) as follows:

Knowledge is not imposed from outside people but rather formed inside them. A person's constructions are true to that person but not necessarily to anyone else. This is because people produce knowledge based on their beliefs and experiences in situations, which differ from person to person (p.231).

Constructivism as a theory of learning has different typologies: cognitive constructivism, radical constructivism, social constructivism ... etc. Radical constructivists, for instance posited that a learner constructs knowledge which is worthy for him or herself (Pritchard and Woollard, 2010). This is a radical shift about knowledge and cognition; hence, according to radicalists, knowledge is not passively received but actively built up by the learner; and the function of cognition is 'adaptive which serves the organization of the experiential world' (Von Glasersfeld 1989, cited in Pritchard and Woollard, 2010, p.8). Cognitive constructivists claim that knowledge construction is a personal enterprise (Garfield, 1995). Social constructivists, on the other hand, value culture and context and posited that individuals build knowledge of their surroundings through social interaction (Beck and Kosnik, 2006). That makes knowledge a social product, and learning a social process (Pritchard and Woollard, 2010). As a result, they perceived that learners learn best in groups where they can share and develop ideas and contribute to solving problems (Scales et al., 2011).

Number of scholars contributed to the emergence and development of constructivist view of learning; but Piaget, Vygotsky, and Bruner have been the gurus whose ideas are still dominant in the discourse of constructivism (De la Sablonnie' re et al, 2009; Reigeluth et al., 2017). According to Bruner's view "learning is an active, social process in which learners construct new ideas and concepts based on their current knowledge" (p.16), and the teacher is the key element of the process in facilitating learners' construction of new ideas. On the other hand, Vygotsky states that social interaction that helps children to be scaffold¹⁷ is fundamental to their learning (Reigeluth et al., 2017) through which they can effectively maximize their learning; and teacher plays the role of scaffolder who assist the child to transit across the ZPD. Medium of

¹⁷ Adjusting, coaching, and instructing

instruction is a commonplace to both Bruner and Vygotsky. But, Piaget's view of knowledge construction differs from Bruner and Vygotsky because of the fact that Piaget considers knowledge construction as a personal enterprise. Common to constructivist view of learning is that knowledge is not imposed by people from outside; rather it is formed via active engagement of the learner (Schunk, 2012). Thus, children are agencies who individually (cognitive constructivism) or actively (social constructivism) construct their own knowledge, rather than merely copying knowledge (Garfield, 1995), and teachers are facilitators of learning (Reigeluth et al., 2017). Moreover, constructivism provides due emphasis for learner's prior knowledge, understanding, and experience for meaningful learning to take place, (Pritchard and Woollard, 2010).

Classroom guided by constructivist orientation is unique from that of the behaviorist orientation; the role of the teacher and the learners in the former orientation is vividly shown by Burbules and Linn, (1991, cited in De la Sablonnière et al, 2009, p.3); it states that: "[t]he learner has the responsibility to accommodate the learning process to his/ her own unique learning style in order to structure his/her own learning. The teacher's role is that of a guide who assists the learner in the difficult process of constructing his/her individual system of knowledge."

With regard to the role of teachers in constructivist classrooms, Schunk (2012) viewed teachers who

...should not teach in the traditional sense of delivering instruction to a group of students. Rather, they should structure situations such that learners become actively involved with content through manipulation of materials and social interaction (p.231)

In the same vein, Reigeluth et al (2017) argue that in constructivist guided classrooms, teacher is not a knowledge transmitter; rather he/she is the one who assists learners in setting goals and in designing or selecting tasks; who facilitates task performance and learning, who helps evaluate performance and learning and, who mentors the learner. On the other hand, the child is an active self-regulated learner and one who teaches others when needed.

Although the arguments on the superiority of constructivist learning still persist (Kirschner et al., 2006, Tabulawa, 2013), empirical evidences show that classroom success is

closely linked with the interpersonal skills of the learner and the way in which he or she interrelates with others (McGinnis and Goldstein, 1997 cited in Pritchard and Woollard, 2010). Though not always, instruction is felt to be best when it fosters construction (Reigeluth, 1997)

The post-1994 educational reforms in Africa require classroom practice to adhere to the principles of constructivist approach in which knowledge construction is the role of the learner (Tabulawa, 2012), with of course, the guidance and follow up of the teacher (Alemayehu and Solomon, 2007). The resultant effect is a child who is problem solver, critical thinker, and as an adult, one who is able to fully participate in national affairs (MoE, 1994). Thus, in addition to their kernel quality in promoting child learning, these reforms have been thought to increase democratization via creating better informed voters and leaders (Reigeluth et al 2017). The shift from unitary perception of reality to a more plural one since the early 1990s necessitated the change (Tabulawa, 2013). Moreover, enhancing economic competitiveness is another push factor of the reform (Reigeluth et al 2017). Via applying constructivist learning, advocates aspire to create workforce who have “elevated and flexible level of cognitive and creative thinking skills” (De la Sablonnie` re et al, 2009, p.5).

The same wind of change initiated the post-1994 reforms on teaching and learning in Ethiopia. Government, in its various educational directives, sanctioned elements of the constructivist learning theory and especially of social constructivism (MoE, 1994; 2009; 2013,)¹⁸. Via these instructional reforms, it envisions to install skills such as problem solving, critical thinking, creative thinking, and democratic thinking, and collaboration skills into the generation (MoE, 1994). These skills are sometimes called 21st century skills (Chu et al, 2017). Learning these skills, according to the same authors, require children to be active agents who shoulder heavy responsibility for their own learning.

With respect to teachers in constructivist paradigm, good teachers are thought to be good learners (Scales, 2011); consequently, their responsibility, once they acquire these skills themselves, is to assist children acquire the 21st century skills. Limitation of teachers in acquiring these skills

¹⁸ Primary school Teachers curriculum framework and KG-12 curriculum ...

...may affect their teaching performance in leading, guiding, modeling for and probing students in evidential explanation to help them acquire twenty-first century skills in a student-centered and inquiry-based learning mode (Chu et al, 2017, p.111)

There are various ways through which teachers can acquire 21st century skills; but lifelong learning which is inbuilt in the workplace is an effective strategy suggested by Chu et al (2017). This is because inbuilt workplace learning characterized by collaboration, inquiry learning, and reflection is superior to workshops, seminars and similar techniques of teachers' professional development schemes.

2.7 Determinants of OL in the context of learning post-1994 instructional reforms

Empirical evidences show reform implementation is “risky and hard, which often fall short of expectations” (Skogan, 2008: 23). It faces formidable obstacles from various sources at different levels of the system (Fullan 2007). There is plethora of scholarly efforts that have been tried yet to dig out the underlying reasons behind success or failure of instructional reforms. The majority of this scholarly works attribute the failure/success to resources (both human and material) and context where the reform is implemented. The synthesis of literature below, however, tries to underscore on factors within the reform itself and the reformers and the related problems which arouse in relation to the reform and reformers.

2.7.1 Factors within the reform and reformers

The reform and the reformers play critical roles for instructional reforms to succeed or fail. One such stream of discourse focuses on the coherence in thinking required between acquired and required classroom practices. The acquired is the way of practicing teaching in the past and the required is the knowledge/skill necessitated by new reforms. Classroom practice in constructivist paradigm is a sharp contrast to the behaviorist paradigm (Pritchard and Woollard 2010), and requires teachers to make a paradigm shift in the way they do teaching/learning. However, existing arguments show that implementing instructional reforms that require teachers make a paradigm shift in daily routines do rarely succeed (Reigeluth, et al., 2017; Tabulawa, 2013). This is because of the fact that such instructional reforms, according to Fullan (2007) not only require teachers to practice old jobs in new ways but also bring unfamiliar and challenging tasks that have never been imagined.

Schlechty (1976, cited in his 2009 publication and Berkovich, 2011) also found similar results; Schlechty reported that curricular innovations that are not compatible with the existing social structure of schools and classrooms are likely to be either modified to fit existing patterns of behavior and thus not affect student learning, or will meet resistance and will eventually be abandoned because it is thought to be inappropriate to the local situation, or will create tensions and cause the social structure of the school or classroom to shift in ways that will accommodate the change.

The other factor within the reform is coherence among reforms (Viennet and Pont, 2017); for an instructional reform to succeed, programmatic and structural changes introduced to support reform implementation shall derive the change rightly (Fullan 2006, Darling Hammond 2012). In this regard, Fullan (2011) positioned that prioritizing: capacity building over accountability, group solutions over individual quality, instruction over technology, and systemic strategies over fragmented ones increases the chance of reform implementation. Reforms guided by the wrong drivers, according to Fullan (2011), are deemed to failure since they do not change the day-to-day practice of school systems. Using the same analogy, programmatic reforms introduced to leverage implementation of post-1994 instructional reforms in Ethiopia such as Continuous Professional Development (CPD) program and School Improvement Program (SIP), and structural reforms such as school clustering and one-to-five organization might have played the role of right or wrong drivers, vis-à-vis implementation of the instructional reforms.

The breadth and depth of the reform also matters; for reforms in classroom practice to succeed, full scale reform is more successful than piecemeal changes, because “whatever remains untouched will overwhelm innovation” (Baum, 2002: 177) and success will remain futile “until wider social and institutional failures are addressed” (Desimone 2002, p.458). Full system reform to Fullan (2011) is reforming just hundred percent of the system. By the same token, changing the pedagogy without changing the design of curricular materials seldom works or reforming the curriculum without changing the assessment modality rarely works. In view of this, a large-scale study by National Research council, USA found that teacher efforts to exercise new way of classroom practice were undermined by standards, assessments, and teaching and textbook requirements (National Research Council, 1999). According to the same report, the volume of curricular materials (textbooks) is another constraint to challenge teachers not to

exercise teaching and learning suggested in constructivist orientation. The report suggests “superficial coverage of all topics in a subject area must be replaced with in-depth coverage of fewer topics that allows key concepts in that discipline to be understood”, but without entirely abandoning the goal of coverage.

With regard to reformers view, the same educational reform may have a success story in one context, but the opposite in another; variation in context is the obvious reason, but to Fullan (2011, p.122), success or failure is because of the underlying assumptions about change held by those leading the change. Right assumptions of change according to him a) accommodate the realities of implementers; b) understand implementation as a process of clarification that comes through reflective practice; c) appreciate conflict and disagreement from implementers as positive signs of change; d) make fair balance between pressure and reinforcement; e) understand that positive change takes time; f) attribute failure to myriads of factors other than implementers’ resistance; g) don’t expect all to change practice at the same time; h) use evolutionary planning and problem-coping models based on knowledge of change process; i) diversify evidences up on which to base action decisions [valid knowledge, political considerations, on-the-spot decisions, and intuition]; and j) focus on changing the culture of institutions, not on implementing single reform. One such action to change the culture is creating a learning generation through building a learning school community (Senge et al., 2012; Fullan, 2006)

The assumptions driving reformers’ thinking also influence the fate of reform implementation; quoting Reigeluth et al. (2017) at some length may describe the severity of the challenge:

Perhaps the greatest challenge with implementing the [post-1994 instructional reforms] is the difficulty that instructional theorists, researchers, educational policymakers, and practitioners face in transcending Industrial-Age mental models or mindsets about instruction in both education and training contexts. It is hard for us to conceive of schools without grade levels, without courses, without tests, without grades, and without terms or semesters. To implement [these reforms] effectively, many stakeholders must come to understand education in a very different way from traditional mental models. If piecemeal reforms are difficult within such a highly politicized and bureaucratic system, paradigm change is an order of

magnitude more difficult. It is like trying to transform a railroad system into an air transportation system. It requires fundamental changes in all parts of the system, or at least enough parts to reach the tipping point where more pressure is exerted by the new parts to change the remaining old parts, than the old parts exert on the new ones to change back. This means that the transformation process is more expensive and time-consuming than are piecemeal reforms (p.2).

2.7.2 Teacher Resistance

If the reform ideas come from outside, without meaningful participation of implementers, a reform will fall short or fail to take root (Skogan, 2008). The outsider may be politicians, academics, consultants or donor agencies. This approach to reforming teaching and learning decreases the love of profession and enthusiasm among teachers and intensify teacher resistance towards reforms (Can, 2010; Berkovich, 2011). On the contrary, teachers' autonomy to innovate and strong teacher professional communities would increase the probability of reform implementation (Rowan and Miller, 2007).

According to Fullan (2007), however, the nature of the reform and the school context where the reform get implemented matter most in instigating teacher resistance than the reforming approach. Consequently, teacher resistance towards instructional reform occurs when teachers are required to implement explicit reform in the context of uncomfortable school climate. But, in the absence of explicit reform idea and uncomfortable change climate, there is a likelihood to develop a sense of inertia. According to the same author, comfortable change climate but vague reform idea will lead teachers to practice the instructional reform very superficially. Full-fledged implementation of instructional reform, therefore, requires comfortable climate for change with an explicitness of reform ideas, and agents operating in conditions of high trust, collaboration, and effective leadership (ibid). One of the factors that leverage creation of comfortable climate is building schools into a learning organization (Senge et al., 2012; Fullan, 2007; Schleicher, 2018).

Baum (2002) interpreted teacher resistance to implement reform in classroom practice with respect to three perspectives: the rational perspective, socio-political perspective, and psychoanalytic perspective. The rationale perspective argues that teachers reject reforms when they lacked solid knowledge base on the reform idea. The sociopolitical perspective posited that

absence of consensus between the implementer and those who initiated the reform idea is the source of teacher resistance. On the other hand, the psychoanalytic perspective claim that, in addition to lack of knowledge and conflict of interest, “psychological structure of teaching, arouse anxiety for teachers to defend themselves by resisting outsiders” (p.173).

The normative theory of change provides equivalent explanation for failure of reforms; it states, the majority (80%) of practitioners has to support the change in order that the new change to get implemented (De la Sablonnie` re et al, 2009), otherwise, people may revert back to established way of practicing routines. According to this theory education reforms fail because of the fact that either the majority doesn’t support the reforms or “the reform-minded minority is not unified, vocal and consistent” (2009, p.6). This theory in education context implies that if majority of teachers resisted an instructional reform or if those who received the reform aren’t ‘unified, vocal or consistent’, then the instructional reform will not take root in the classroom.

Moreover, teachers may not warmly receive any reform that adds extra burden to their workload since it forces them to stay out of their comfort zone (Skogan, 2008). Unwillingness to come out of the comfort zone become severe when the reform is a prescribed one, which denies teachers the opportunity to buy-in the reform idea (Can, 2010; Rowan and Miller 2007; Fullan, 2007).

2.7.3 Leadership

Leadership is the leading factor in determining organizational learning (Can 2010) and the success or failure of reform implementation (Silins, Mulford, Zarins 2002). It promotes and sustains learning gains for teachers and students (Darling-Hammond et al 2010). According to Rowan and Miller (2007):

An absence of managerial pressure to change teaching practices in a clearly specified direction will result in teachers’ making only surface changes to their teaching practices; [On the contrary], pressure for standardization through leadership [force teachers to] move away from conventional teaching practices and toward the standards-based forms of instruction advocated (Pp.260, 262)

The type of leadership is, however, a point of argument in the discourse of reform implementation. Some researches show that transformational leadership creates opportunity for

OL. Similarly, Leithwood, Leonard, Sharratt (1998) and Silins, Mulford, Zarins (2002) show that this form of principal leadership¹⁹ is among the most important to help teachers learn and implement new reforms. However, Branson, et al. (2016), cited in Carlyon and Branson (2018) positioned that trans-relational leadership is more effective to learn reforms in school setting, because this kind of leadership approach gives due emphasis for building supportive relationships instead of manipulation. In addition to transforming others, trans-relational leaders, have the skills to recognize their follower's initiative and the significant contribution they can have in the leadership process" [cited in Carlyon and Branson2018]. Branson, et al. (2016) suggest that the essence of trans-relational leadership is "to move others, the organization and the leader to another level of functioning by means of relationships" (p. 155).

Leadership to Fullan (2007) refers to the educational authorities working at national, district level, and school level; which either enable or inhibit implementation of an educational reform. Leaders in the upper hierarchy often sets the agenda for instructional reform; and leaders in the bottom hierarchy also determine the likelihood of change. This is because they are in the forefront "to shape the organizational conditions necessary for success, such as the development of shared goals, collaborative work structures and climates, and procedures for monitoring results" (p.96). Meaningful interaction among these leaders and leadership positions at the time of initiation, implementation and institutionalization of instructional reforms increases the likelihood to take root at classroom level. The same author observes that education authorities who are in charge of reforming education and local practitioners leave in two different worlds to the extent that "each side is ignorant of the subjective meaning world of the other, p.99"

The leadership influences how teachers respond to changes in classroom practice. According to agency theory (e.g., Eisenhardt, 1989; Kiser, 1999; Perrow, 1986; Shapiro, 1987 cited in Rowan and Miller 2007, p.255) implementation fidelity of instructional change is influenced by the type of relationship established between principal and agent. Poor relationship may arise due to four problems: lack of clear instructional guidance, low monitoring for fidelity, agency problems of bounded rationality, and information asymmetry.

¹⁹ Leadership that is empowering, sensitive to local community aspirations, supportive of followers, building collaborative school cultures, and emphasizing the importance of developing a shared vision

First, if the agent resists enacting to the demands of the principal, an instructional reform is prone to failure; the source of resistance could be moral hazard resulted from contradiction between the values of the principal and the agent or agent's desire to shrink the work burden following the new reform. Moral hazard and desire to shrink burden consequently lead to problem of teacher "buy-in" of the reform idea. Second, if agents lack reinforcement for exercising reform ideas (Rowan and Miller 2007), they hardly work toward the desired aims of the principal. Third, due to insufficient guidance or lack of inter-subjectivity with the principal, agents may fail to know the intentions of principals or do not know the ways to realize these intentions. This is especially true when principal leadership for instructional change is imprecise or interpreted through teachers' prior understandings (Coburn, 2005; Spillane, Reiser, and Reimer, 2002 cited in Rowan and Miller 2007). The fourth reason is information asymmetry (not being able to monitor agent's work), when principals fail to monitor agents, implementation fidelity will be challenged. On the other hand, monitoring agents' work through meaningful and continuous feedback, according to Rowan and Miller (2007), will increase implementation fidelity.

2.7.4 Other factors

In addition to the factors within the reform/reformers, teachers and reform leaders; other factors may determine success or failure of instructional reform. History is one of these factors; that is, continuous failure in implementing reforms exposes school community to develop apathetic feeling towards next reforms (Fullan 2007); in the contrary, successive achievement will make them enthusiastic towards new reforms. While the latter feeling helps schools to develop capacity (efficacy), the former will leave them in an attitude of incapacity. According to Fullan (2007) such feelings happen because "people carry [subjective] meaning from one experience to the next, p.94"

Second, external factors such as NGOs and the community outside of the school also enable or inhibit implementation of reforms. Funding agencies according to Crossley and Watson (2009) and Tabulawa (2013) immensely influence initiation, implementation and institutionalization of instructional reforms.

Third, school resources allocated to activities required for change and productive capacity²⁰ determine its instructional capacity (Malen and Rice, 2004). According to Corcoran and Goertz (1995), key components of instructional capacity fall into three categories: (a) the intellectual ability, knowledge, and skills of teachers; (b) the quality and quantity of the resources available for teaching, including staffing levels, instructional time, and class sizes; and (c) the social organization of instruction or instructional culture.

Moreover, the material resources; such as budget (National Research Council, 1999; Huberman and Miles (1984, cited in Fullan 2007), time for continuous learning and knowledge sharing (McCharen, Song, and Martens, 2011), classroom size and technology (Can, 2010) can facilitate or debilitate the effort. However, there are arguments on whether not material resources determine success or failure of instructional reforms. The quotes below reveal the prevailing contrast in the discourse:

Learner-centered education failed because of the unclear nature of the understanding and the actual application of [the concept], and the scope of the intended change that focused on the high pedagogical ideal. As sound as the implementation process was in many places, it failed to transport the understanding of learner-centered education into classrooms (Chisholm and Leyendecker, 2008: p.201). The main reason that change fails to occur in the first place on any scale, and is not sustained when it does, is that the infrastructure is weak, unhelpful, or working at cross-purposes (Fullan, 2007: p.18).

Uniqueness in context between the source and reform borrower is another factor that influence reform implementation (Crossley and Watson 2003, Tabulawa 2013). In support of this view, Fullan (2007, p.64) noted that ‘what works in one situation may or may not work in another’.

If a reform idea lacks supportive environment with regard to the above factors, according to Huberman and Miles (1984, cited in Fullan 2007), it fails to: generate a skilled critical mass staff who are committed to the change; and consequently, to institutionalize the reform.

²⁰ *the ability of a school to translate resources into expected outcomes (Corcoran and Goertz 1995)*

2.8 Theoretical framework

“To remain viable in an environment characterized by uncertainty and change, organizations and individuals alike depend upon an ability to learn”

Michelle Wallace (1998, p.20)

This research is guided by two interlinked theories: Change Theories (CT) (Fullan, 2007; Chin and Bennes, 1994) and Organizational Learning Theory (OLT) (Senge, 1990 and 2012; Louis, 2016). These theories have a potential to understand implementation of instructional reforms independently. The combined use of both theories, however, may have more potential. Besides, learning and change are inseparable; learning changes entities while all changes require learning (Park, 2006; Fullan and Miles, 1992; Yeung et al., 1999), and this is usually true in human beings so does in organizations. Using these theories as theoretical lens, this study attempted to study the learning of post-1994 instructional reforms in primary school context.

Thus, the theoretical and conceptual frameworks of the study are discussed in this chapter. The theoretical framework describes the underlying concepts and assumptions of each of the theories and the interlink between them. The conceptual framework discusses the constructs of OLTs and CTs. In addition, the enablers and inhibitors of learning the instructional reforms were discussed in line to the above-mentioned theoretical lenses.

The first lens through which to understand the post-1994 instructional reforms is theory of change proposed by Michael Fullan²¹ and Chin and Bennes (1994). Theory of change is a collection of predictive assumptions that derives a program seeking to effect change or reform (Connolly and Seymour, 2015). Michael Fullan, who proposed his own theory of change, claims that great reform ideas may get lost as a result of wicked change process (2007). In this regard, he synthesized reform initiatives in the West that had been introduced via either a top-down or bottom-up approach, but that remained unsuccessful.

On the basis of the empirical evidences synthesized, he theorized that the most successful approach to reform is one resulted from a fair balance between the two approaches. Because;

²¹ There are various change theories in use but change theory proposed by Michael Fullan has much in common with Organization Learning Theory. Besides, he is a professional guru in the area of whole system educational reform

top-down change doesn't work and bottom-up changes often fail to connect to the authority structure (Fullan, 2007). Thus, the right reform approach is the one that is guided by principle of fair balance because such balance helps schools to adapt reforms to their own context, and to influence further reforms.

The other balance that Fullan calls for proper handling (citing Berman and McLaughlin, 1977) is the bureaucratic-vs-problem solving orientation while governments make adoption decision. The bureaucratic orientation urges governments' adoption decision of a reform so as to obtain extra resources for other purposes; whereas adoption based on problem solving orientation is aimed at solving particular local problems. Thus; if the orientation is bureaucratic, initiation of change is made more for political and symbolic value than for educational merit. Such decisions are important for political survival, according to Fullan (2007). According to the same author, most reforms are initiated to get extra resources for political survival. Moreover, a successful theory of change, according to Fullan (2007, 2006), fulfills three phases and seven premises. The phases are initiation, implementation and institutionalization. And the premises that should govern decision at each phase are focus on motivation, result-oriented capacity building, learning in context, changing context, reflection; tri-level engagement; and perseverance. Fullan (2007) has identified list of variables that influences the success or failure of a reform at each phase; and assert that the fate of a given educational reform is determined by the interplay among these variables, which will be discussed in the conceptual framework.

With regard to teaching and learning, his change theory asserts that reform implementation at the classroom level demands change in three dimensions; change in the use of new instructional resources, use of new teaching approaches, and alteration of pre-existing belief about pedagogy. Changes in beliefs and understanding, according to Fullan, are the foundation of achieving lasting reform (2007). The first two dimensions necessitate behavioral change and the third demand change in cognition. This shows that what schools think (belief and understanding) and do (instructional practice) determines the success or failure of reforms.

The other change theory to look into the problem is proposed by Chin and Bennes (1994), and states that reforms can be introduced via three different change strategies namely empirical-rational, power-coercive, and normative re-educative. Quinn and Sonenshein (2008) name these strategies as telling strategy, forcing strategy, and participating strategy respectively. These

strategies have been developed with the intent of answering how government and other change agents approach reform processes (Quinn, 2004). Thus, when reforms are introduced using the empirical-rational strategy, change agents introduce reforms following a strongly rational justification and clear demonstration of the change to beneficiaries whereas if reforms are introduced through the power-coercive strategy, those who initiate the reform assume the highest power which enables them to decide both on the approach and constituents of the reform. That is, a more powerful body imposes its will on a less powerful body (Quinn and Sonenshein, 2008) based on the assumption that implementers are complaints who need directions and sanctions (Nickols, 2016; Hofman et al., 2017). The third strategy, which is less commonly used as reform strategy, is the normative-reducative strategy. This change strategy, unlike the other two strategies, focuses on trust building between change agents working in the top hierarchy and in the bottom (Chin and Bennes, 1994). Thus, reforms introduced using this strategy is the collaborative effort of various stakeholders operating at different level of hierarchy. The three strategies differ mainly in the kind of relationship that exists between change initiators and implementers. Consequently, the more democratic is the relationship between change initiators and implementers, the higher is the likelihood to include voices from grassroots level implementers. On the contrary, the more autocratic is the relationship between the two, as in the case of the power coercive strategy, the higher will be the likelihood for implementers to comply with the demands of change initiators

The other theoretical lens is Organizational Learning Theory (OLT); which has been working well in business firms since the publication of 'the fifth discipline' by Peter Senge (Law and Chuah, 2015). Even before this seminal work, OL is known to the academic society (Argyris and Schon, 1978; Cyert and Marsh, 1963; cited in Calhoun and Starbuck, 2011). Its emergence is linked to business sustainability and change of parameters to secure this sustainability (Fauske and Raybould, 2005). Stated otherwise, in the fast-changing world, today's knowledge may get obsolete tomorrow. Such uncertainty demands unlearning unproductive practices and learning new ones concomitantly (Nystrom and Starbuck, 1984; cited in Hora and Hunter, 2013) and such learning takes place in workplace setting.

Thus, OLT is one of the major theories that are helpful to understand such inbuilt learning in an organization (Senge, 1990 and 2012; Argyris and Schon, 1978; Huber, 1991; Law

and Chuah 2015), especially in school context (Robertson and Leithwood, 1999). According to OL theorists²², learning becomes a prerequisite for organizations to survive in an environment of rapid change (Senge, 1990 and 2012; Murray, 2002). They also underscore that, all organizations have the ability to transform into a learning organization though their efficiency differs (Senge, 2012; Can, 2010; Knapp, 2008). There is also consensus that schools can be designed as learning organizations (Senge et al., 2012; Fullan, 2007). As a result, organizational knowledge creation has become a key element in driving school reform and innovation (McCharen, Song, and Martens, 2011, p. 676). Hence, OLT is employed in this study to explore the learning of post-1994 instructional reforms in primary schools.

In School context, therefore, OL is nothing but it is change among school level actors on how they think and do to attain their mandated mission²³ (Hora and Hunter, 2013). Hence, OLT has become a theory that is shaping actions and thoughts of social organizations (Law and Chuah, 2015) such as schools. It views OL in school context neither as mere sum up of individual learning (Torokoff and Mets, 2008) nor learning of the organization that is to be distributed to its members. Organizational learning theorists claim that because schools function beyond a simple aggregation of teachers, the knowledge embedded within the school is inherently greater than the sum of the knowledge possessed by individual teachers (Smith and Lyles, 2011). With regard to the process of learning, some argue that organizations learn like human beings do (Walsh and Ungson, 1991; Huber, 1991), others claim that portrayal of organizations as learning entities is merely metaphoric (Wellman, 2009; Argyris and Schon, 1978); they do not literally remember, think or learn (Wellman 2009), rather individuals are agents of learning, whose learning collectively represent organizational learning (Law and Chuah 2015). However, there is agreement that an organization is its people (Fauske and Raybould 2005) and individual learning is the sine qua non for organizational learning.

Organizational learning theorists explain the outcome of OL either in terms of cognition or action: those who view OL from the cognitive perspective (e.g. Kolb, 1984; Huber, 1991; Wellman, 2009) claim that organizations like human beings search for information, store in

²² The well-known theorists of OL include Cyert and March (1963), Olsen (1975), Argyris and Schön (1978, 1996), Daft and Weick (1984), Kolb (1984), Engeström (1987 and 2004), Huber (1991), Lave and Wenger (1991), Weick (1995), Nonaka (1994), Nonaka and Takeuchi (1995), Wenger (2009), Wellman (2009), and Senge (1990 and 2012).

²³ This mission in this study is understood as implementing instructional reforms provided in the ETP

memory, interpret and retrieve information. According to Leavitt (2011) thinking elements of OL are more relevant to this group of theorists. On the contrary, there are scholars, who view OL's action dimension (Nevis, DiBella, and Gould, 1995) worthy of consideration. They argue that OL is understood in terms of the daily routines which the organization, teams and individuals perform. The actions may be observed while organizational members identify and correct errors (single-loop learning) or question long held assumptions to transform practice (double-loop learning) (Argyris and Schon, 1978).

The two groups of OL theorists differ in the way organizational learning takes place (how), in the learning target (who), and in the learning context (Leavitt, 2011). Nevertheless, the two views are hybridized by a third group of theorists who view the outcome of OL both as cognition and action (Argyris and Schon, 1978; Senge, 1990 and 2012). Thus, OLT states that for OL to take root, organizations need to be rearranged so that single-loop or adaptive learning or exploitation learning could evolve to higher learning (generative, double-loop or explorative).

To three of the views mentioned above, OL is an intelligent response to changes inside and outside of the organization where the response is manifested in "changes in collective thinking, organizational design and behavior" (Knapp, 2008, p.525). It is taken as an asset for organizations struggling with change and growth (Murray, 2002, p.239). Consequently, LOs aim to transform old behaviors and patterns of thinking and improve skill and know-how to adapt to the challenging dynamic environment (Law and Chuan, 2015, p.19).

Regarding the learning entity, there is consensus among OL theorists that OL is multi-level; that is, it takes place at individual, team and organization level (Senge, 1990; Giesecke and McNeil, 2004). Accordingly, organizations learn from the skills, approaches, and commitment of teams and individual members; and teams bridge learning between individual learning and organizational learning.

The two theories (i.e. CT and OLT) have much in common; building shared vision/meaning, team work/collaboration, personal mastery/capacity building, system thinking and mental models/belief and understanding are their commonplaces. Besides, Fullan wrote that schools and districts must learn each other for system change to happen in large scale. Nevertheless, unlike OLT, Fullan's CT treats OL as if it is similar to Professional Learning

Communities, PLC (Louis and Lee, 2016), which are not formal organizations, but “the building blocks on which learning organizations stand” (Schlechty 2009: 115). The combined use of these theoretical lenses is, therefore, helpful to understand the learning of post-1994 instructional reforms in primary schools with regard to (i) examination of the reform process using the change theories, and (ii) how primary schools’ as LO have learnt these reforms using the OLT.

There are reasons for using CT and OLT to understand post-1994 Instructional Reforms (IRs) in Ethiopian context. With respect to the reform approach, the post-1994 instructional reforms in Ethiopia alike any structural and programmatic reforms of the ETP have been claimed to be Government panaceas (Tefera, 1996; Semela, 2014; Tessema, 2014; Tadesse and Melese, 2016). Nevertheless, there is parallel argument that claims the reforms were participatory (Zewudie, 2018; MOE, 2002b and 1996). According to CT, the nature of educational reforms and the reform approach followed are powerful in determining the fate of reform implementation (Fullan, 2007; Darling-Hammond, 2012; Bascia and Argreaves, 2000). Thus, exploring how these reforms have been introduced via the lens of CT appears convincing.

Regarding, OLT, the post-1994 instructional reforms are embedded in social constructivist orientation; which calls for active construction of knowledge through learners’ interaction. However, it is hardly possible for schools to create learning opportunity for students without being a learning organization themselves. Consequently, OLT is becoming a powerful theory to understand how schools learn educational reforms (Fullan, 1993; Leithwood and Louis, 1998; cited in Fauske and Raybould. 2005; Torokoff and Mets, 2008).

In sum, through the combined use of the theoretical lenses, this study tries to examine the reforming approach, the magnitude and mechanisms of learning the reforms, and the factors fostering/ inhibiting the learning of those reforms in school context.

2.9 Conceptual Framework

Studies (like Fullan, 2007; Bascia and Hargreaves, 2000; Hopkins and Levin, 2000, and Darling Hammond, 1991) show educational reforms elsewhere in the world little succeed in improving school achievement. Similarly, local research (reviewed in section 1.2) proved that instructional reforms endorsed following the ratification of the 1994 education and training policy such as child-centered education, continuous assessment, reflective practice, action

research among others have rarely succeeded. There might be myriads of reasons for this; but in this study, I argue that the failure is concealed behind: (i) the process through which these reforms have been introduced and (ii) the schools' ability to learn these reforms, and (iii) the context that enable/inhibit operation of the two processes. In the next few pages, the details are presented.

The process through which reforms have been introduced is critical to the success or failure of educational reforms. Literature is gray to choose between the bottom-up reform approach and top-down-bottom-up mix (e.g., Fullan, 2007) since there are success stories of reforms introduced via both of these approaches. Nevertheless, success stories of reforms prescribed from the top especially following the power coercive approach are limited (Schlechty, 2009; Fullan, 2007; Chin and Bennes, 1994) as we have seen in the review section.

According to Fullan (2007), educational reform is a tri-phase process: initiation which consists of the process that leads up to and includes a decision to adopt or proceed with a change; implementation that involves the first experiences of attempting to put a reform into practice; and institutionalization that refers to whether the change gets built in as an ongoing part of the system or disappears by way of a decision to discard or through attrition.

Initiation is a stage when adoption decision is made by a responsible body: this stage according to Fullan (2007) is influenced among others by multitude of factors: quality of the reform, access to information about the reform, external change agents, new policy funds, and orientation of initiator. This phase is decisive for the success or failure of subsequent phases since it “generate[s] meaning or confusion, commitment or alienation, or simply ignorance on the part of participants and others affected by the change” (Ibid, p.82).

The implementation phase is the phase when reform ideas/programs/activities come into effect replacing old ways of undertaking routines (ibid). Characteristics of the reform (need, clarity, complexity and quality/practicality), local characteristics (teachers, school leaders, community and educational authorities operating at different levels) and external factors (NGOs and other agencies) determine success or failure of reform implementation.

Institutionalization or continuation is the phase where a decision to continue or abort the reform idea is made. This phase depends according to Huberman and Miles (1984, cited in Fullan 2007, p.102) on the degree to which the reform:

(1) gets embedded or built into the structure (through policy, budget, timetable, etc.); (2) has, by the time of the institutionalization phase, generated a critical mass of administrators and teachers who are skilled in and committed to the change; and (3) has established procedures for continuing assistance (such as a trained cadre of assistants), especially relative to supporting new teachers and administrators.

Thus, if the reform is built into the functioning structure, if it successfully mobilizes a critical mass from the school community, and if it gets a critical mass of professionals to aid fellows; the possibility to institutionalize the reform idea is high enough. Fullan (2006) suggested seven premises to institutionalize a reform idea: focus on motivation, result-oriented capacity building, learning in context, changing context, reflection; tri-level engagement; and perseverance. Fullan further revised the premises (2011); and asserts that the whole reform process will get successful if reformers prioritize right drivers over wrong drivers. That is, prioritizing- capacity building over accountability, team quality over individual quality, instruction over technology and integrated strategies over fragmented ones.

The success or failure of the above-mentioned phases depends on the way the reform is being endorsed; that is, if the reform is endorsed in a power coercive (top-down) approach, the reform is destined to failure (Chin and Bennes, 1994). Thus, the authors (ibid) suggest the empirical-rational and normative-re-educative approach while initiating the reforms since these approaches value the voices of grassroots level implementers. Similarly, empirical studies (Viennet and Pont, 2017; Pietarinen et al, 2017; Cerna, 2013; Hargreaves et al., 2010; Fullan, 2007 and 1994) show that schools accommodate reforms endorsed particularly following a hybrid approach (mix of top-down and bottom-up approaches) than those endorsed following either of the approaches. If not, the reform tradition may play against the success of the reforms since it results in buy-in problem and resistance from implementers (Fullan, 2007).

Regarding OL, there is ample evidence in the literature produced on the potential of OL in creating schools that continuously and collaboratively learn (McCharen et al., 2011; Senge et al., 2012; Stoll and Kools, 2017). The positive impact of creating such schools goes beyond the school itself. Senge's claim that reads "If we want the world to improve ... then we need schools that learn" (2012, p.12) confirms this assertion.

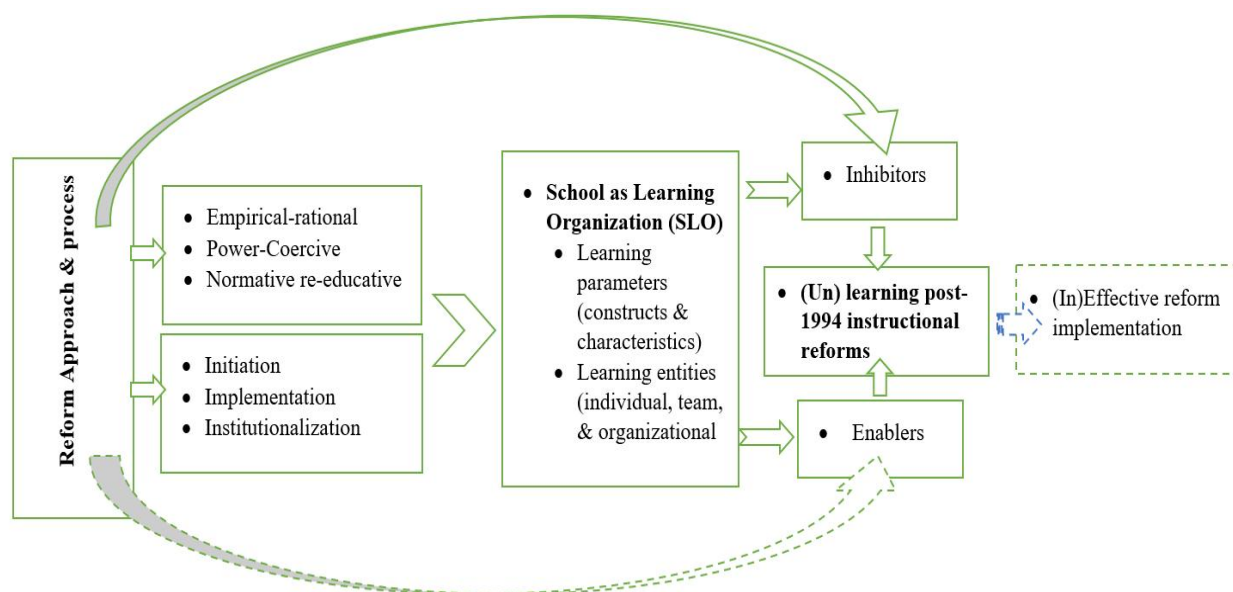
Previous studies reviewed in the literature section of this study portrays LO in terms of either the cognitive view, action or behavioral view or the balanced or the hybrid view. The cognitive view explains LOs in terms of constructs related to knowledge management, the behaviorist view, however, interprets LOs in terms of the characteristic features, and the hybrid view mixes the constructs and the unique characteristics. This study employed the hybrid view because; (i) it is a model of OL often adapted to study schools by many researchers who conducted research on organizational learning in school context (eg Senge et al 2012; Park, 2006; Liu and Liu, 2018; Panagiotopoulos et al 2018; Collinson et al 2006; Torokoff and Mets, 2008); (ii) integrating the perspectives (cognitive and behaviorist) could maximize the potential of understanding features of a learning school more than independent use of either view; and (iii), individual learning has both behavioral and cognitive dimension and this is also true in organizations that learn (Scott, 2011).

The constructs are related to knowledge management, Huber (1991) synthesized four OL constructs linked to the thinking perspective namely knowledge acquisition, information distribution, information interpretation and organizational memory. According to this author, the constructs refer to the process by which knowledge is obtained (knowledge acquisition), information from different sources is shared and thereby leads to new information or understanding (information distribution), distributed information is given one or more commonly understood interpretations (Information interpretation) and knowledge is stored for future use (organizational memory). Whereas, the characteristics are unique features manifested by learning organizations. According to Stoll and Kools (2017), a learning school exhibit seven unique characteristics. These include developing and sharing a vision centered on the learning of all students; creating and supporting continuous learning opportunities for all staff; and promoting team learning and collaboration among staff. Besides learning organizations establish a culture of inquiry, innovation and exploration; develop embedded systems for collecting and exchanging

knowledge and learning; promote learning with and from the external environment and larger learning system; and model and grow learning leadership (p. 3). Learning organizations including schools that display the constructs and characteristics make it happen via multiple learning agencies: individual, team and organization level (Argyris and Schon, 1978; Senge, 1990 and 2012; Murray, 2002; Huber, 1991; Crossan, et al 1999; Rait, 1995; and Shrivastava, 1983).

In this study, learning in organization is represented not in terms of mind as an entity, but mind as an activity (Leithwood, Leonard, and Sharratt, 1998) which increases over time based on self-efforts. According to Resnick and Hall (1998), there are two views of intelligence namely entity theory and incremental theory, the former views ability as unchangeable; whereas, the latter view considers ability as changeable by taking “an active stance toward learning and mastery opportunities, p.105”. Thus, people who think that ability is something that grows incrementally invest more energy to learn via application of self-initiated strategies. The LO takes the latter stance (Senge, 1990, 2012; Huber, 1991; Argyris and Schon, 1978). Moreover, the study adopts the LO perspective that considers organizational learning as a change in both cognition and action. That is, OL that takes place at individual, team and school level will be measured in terms of the changes occurring in practicing post-1994 instructional reforms and the imbedded thinking that guides the actions of individual teachers, teams and schools. Sustained OL requires a professional learning community that is committed to display the constructs and characteristics of a learning entity (Louis and Lee, 2016; Fullan, 2007).

Finally, the theoretical lenses employed in this study operate within the context; therefore, the drivers and inhibitors of OL in school context are part and parcel of the conceptual framework. The relationship among the variables discussed above (ie., reform tradition, organizational learning in schools, and the drivers and inhibitors of organizational learning) is displayed in the diagram below.



Source: developed by the researcher based on literature

As shown in the diagram, the framework begins with three reform approaches—empirical-rational (evidence-driven), coercive (top-down mandates), and normative re-educative (collaborative capacity-building)—which shape how reforms are introduced. These approaches feed into a cyclical reform process comprising initiation (policy introduction), implementation (school-level adoption), and institutionalization (long-term integration). To assess learning, the framework analyzes three learning entities (individuals, teams, and organizations) and two learning parameters (cognitive thinking and behavioral action), which collectively determine whether schools learned or challenged to learn the post-1994 instructional reforms. These dynamics are mediated by enablers and inhibitors, predominantly influenced by government actions. The interplay of these factors ultimately leads to either effective or ineffective implementation of reforms. The model underscores how reform strategies, magnitude of learning and learning mechanisms, and contextual factors interact to determine the success or failure of instructional change initiatives.

CHAPTER THREE

RESEARCH METHODOLOGY AND DESIGN

Introduction

This dissertation's methodology section describes the methodical and comprehensive strategy used to answer the research question. This study outlines three distinct stages of data collection and analysis utilizing a sequential explanatory mixed-methods design. Initially, a systematic review was performed to assess the endorsement of post-1994 instructional reforms. Subsequently, a quantitative survey was executed to evaluate the extent of organizational learning in schools. Finally, a qualitative case study was undertaken to provide comprehensive contextual insights regarding the mechanisms of OL adapted by the schools while learning the post-1994 instructional reforms and to identify factors that facilitated or hindered this learning process. This section also explains the reasoning behind this methodological decision, go into great depth about each stage, including the data collecting and analytic techniques used, and discuss rigor and ethical issues.

3.1. Ontological and Epistemological Stance

The researcher's stance about reality and knowledge determines his/her contribution to scientific knowledge (Stake, 1995). Consequently, the choice for a research approach needs to correspond to the researcher's "worldview, personality, skills" (Merriam and Tisdell, 2016, p.1), and experience (Whitehead and McNiff, 2006).

All human beings have their own theories and ways of understanding the world (Wenger, 1998) so do I. The disciplines I have studied in undergraduate (history education) and postgraduate program (Educational Measurement and Evaluation) helped me to be familiar with both qualitative and quantitative research approaches. But the scholarly discourses waging paradigm war between the two approaches seldom forced me to side to neither of the camps. Instead, through reading publications in positivist, interpretivist, and pragmatic perspectives, I tried to understand these perspectives in a manner that one complements the other. This endeavor bears fruit in a thesis work of mine²⁴ that employed methods from both perspectives. Since then,

²⁴ Tadesse, A. (2011). *Continuous Assessment in Primary Schools: Status, Gaps and Challenges*, AAU, MA Thesis

the pragmatist perspective (e.g., Creswell, 2014; Brannen and Moss, 2012; Patton, 2002) guides my research venture. This implies my understanding of reality as a continuum between the two giant views - “**objective existing out there**” and “**subjective and socially constructed**”- instead of being a counter narrative to each other. Especially, in the contemporary postmodern era when multiplicity is the order of the day, different views of reality can complement each other in context; and this defines my ontological stance. Of course, this seems the contemporary research perspective worth doing in humanities and social sciences as clearly stated in Duff (2008); who noted that in the 21st century researchers:

...do not subscribe to a strong form of realism (as their ontology), nor do they believe they can carry out truly objective, value-free research (as their epistemology); they fall somewhere on the continuum between post-positivism and interpretivism (p.29).

Nevertheless; epistemologically, I have the social constructivist stance which views knowledge as something that is created through interaction with others (Lincoln et al., 2018; Scales et al., 2011; Reiguluth, 1997). The aspect of reform I plan to study (instruction), the nature of the theoretical lenses chosen to look into the problem, and my experience as a teacher educator shape my epistemological belief.

3.2. Setting the Scene

The study was conducted in Amhara Region; one of the largest regions in the country. According to the CSA (2007), it constitutes 27% of the total population of Ethiopia. Within this administrative region, there were 15 administrative zones²⁵ (anrseb.gov.et). In addition to the Amharas; other Ethiopian nationalities such as the Agaw, Oromo, and Argobba live in the region.

Recent statistical data (MoE, 2020) shows that the number of children enrolled in primary schools all over Ethiopia reach 20,419,152. The region constitutes 20.1% of gross primary school enrollment, with of course 5.53% decline between 2015/16 and 2019/20, and recently a sharp decline in enrollment due to the prevailing turmoil. These students were enrolled in 8,881 public primary schools hosted in the region, which were categorized into 1,748 clusters.

²⁵ Awji, Bahir Dar City, Central Gondar, Desse City, East Gojjam, Gondar City, North Gondar, North Shewa, North Wollo, South Gondar, South Wollo, Wag Hemra, West Gojjam, West Gondar, and Oromo Nationalities Zone.

With respect to teachers, the same statistics shows a total of 138,238 teachers (M=73,814; F=64, 424) were deployed in these public primary schools. The 10+3 Diploma in teaching is the minimum requirement set for these teachers to teach in both first cycle (1-4 grades) and second cycle (5-8 grades) primary schools. The majority of these teachers (95.4%) hold the required qualification (MoE, 2018), which is 6.1% above national figure.

The newly endorsed education roadmap (MoE, 2018) restructured the previous primary school education into two cycles: primary school (1-6 grades) and middle school (7-8 grades). According to the stipulations of the roadmap, teachers will qualify to get deployed to teach in both levels only if they hold a Bachelor degree (B.A., B.Ed., B.Sc. and equivalent) in teaching profession. However, only 4% of the teachers deployed in the region were qualified for this requirement, which is far below the national average (12.1%) (MoE, 2020).

3.3. Research Approach and Design

3.3.1 Research Approach

Empirical research works conducted in different pockets of the globe to understand reform and change have employed quantitative, qualitative or mixed research approaches. Some of these research works (e.g., Jamali and Sidani, 2008; Silins et al, 2002; McCharen et al., 2011; Bui and Baruch, 2010; Ahonen and Kaseorg, 2009) applied the quantitative approach; others (e.g. Fauske and Raybould, 2005; Can, 2010; Hora and Hunter, 2013) used the qualitative approach while some others (e.g. Torokoff and Mets, 2008) employed the mixed approach. There is no convincing reason inherent to the theories that guides the choice of these approaches; rather the purpose which these researchers aspire to achieve is the rationale behind the selection of either of these approaches.

Understanding schools as learning organizations is a new phenomenon about which little is known (Senge et al., 2012; Murray, 2002). In particular, research works that try to investigate the post-1994 instructional reforms via the combined lens of CTs and OLT are not common in Ethiopia. The qualitative approach is more appropriate to examine phenomena such as this one (Honig, 2004; Gillham, 2000), especially while studying what and how organizations have learnt reforms (Bui and Baruch, 2010; Sun and Scott, 2003). This is due to the fact that learning process in organizations is complex and influenced by a multitude of factors (Sun and Scott,

2003; Datnow et al., 1998). However, the study also employs questionnaires to assess OL at school level; which makes the approach a mixed one. The mixed one is preferred because it maximizes the potential benefit that each approach offers and minimizes the risks separate use of each approach has (Brannen and Moss, 2012). It also has a powerful role to play in fostering better dialogue and creating synergy of quantitative and qualitative approaches (Creswell, 2014; White, 2002; Morgan, 2007), especially while studying policy issues (Onwuegbuzie, 2004). In particular, combining surveys with in-depth case studies in a single study could help researchers to understand the problem in depth (Creswell, 2012). Hence, in this research, a systematic review of published works was conducted to understand how the reforms have been endorsed, and then the quantitative and the qualitative data were collected separately in two phases. Consequently, quantitative survey was conducted first, and in-depth investigation into the problem continued qualitatively to explain the findings from the quantitative data. Consequently, this study is inclined more to the qualitative approach since understanding how something is experienced necessitates qualitative inquiry (Merriam and Tisdell, 2016).

3.3.2 Research Design

Exploring into the learning of post-1994 instructional reforms in primary schools via a combined lens of CTs and OLT was the purpose of this study. To attain this purpose, the **quantitative qualitative** Explanatory Sequential Mixed Methods Design (ESMD) was selected over other designs since this design helps to combine the systematic review, quantitative survey, and qualitative case study (Creswell, 2012; Schoonenboom and Johnson, 2017). Accordingly, the reform approach followed by the government when introducing these reforms was investigated using a systematic review of previous research works published so far and working documents produced by multilateral organizations (which in one way or another had roles in endorsing the educational reforms). However, to understand the reform tradition in the country, the systematic review tried to unpack the reform tradition in the three regimes: the imperial, military, and EPRDF regimes. Then, a quantitative survey followed, covering 48 primary schools randomly selected from 20 woredas in the Amhara National Regional State, specifically East Gojjam (33.3%), North Shewa (35.4%), and South Gondar (31.3%) (**Appendix-1**). Survey is the commonly used research design to plot large number of research participants on how they think, and what they do (Balnaves and Caputi, 2001). Thus, a quantitative data which provides general picture of the research problem (Creswel, 2012) was collected in the second phase of the study

by using a standard questionnaire developed based on Huber (1991) and Stoll and Kools (2017) models of OL. The questionnaires developed based on these models were tried in school context in different countries like Estonia, Greece, Lebanon, and OECD countries. The OL perspective through which I am looking into the problem combines both the cognitive (thinking) and action (behavior) dimensions of organizational learning (Liu and Liu, 2018; Panagiotopoulos et al 2018; Senge et al., 2012; Torokoff and Mets, 2008; Park, 2006; Collinson et al 2006). These questionnaires, known as School as a Learning Organization Questionnaires (SLOQs), were used to assess the extent to which primary schools in the study area have developed into learning organizations in relation to post-1994 instructional reforms.

The third phase of the study employed case study design to explain the findings from the systematic review and the quantitative survey. According to Simons (2009, p.21), the purpose of case study research is to “generate in-depth understanding about a program, policy, institution or system.” Such understanding results in generating knowledge, inform policy development, and/or professional practice. Especially, the following conditions necessitate the choice for case study design: (i) when the main research questions are "how" or "why" questions, Yin (2014) noted, doing case study research would be the preferred method; (ii) case study is a special research strategy that brings quantitative and qualitative methods together (Schwandt and Gates, 2018; Yin, 2018; Mills et al, 2010; Creswell, 2014; Teddlie and Tashakkori, 2009); and (iii) case study is very adaptable to study issues in education (Stake, 1995), and especially important for “understanding pedagogic processes” (Mills et al, 2010).

Finally, justifying why the researcher becomes legible enough to tell others what s/he sees is the unique problem in case study (Kemmis, 1980; cited in Bassey, 2006). I believe that I am eligible to do this case study in at least three grounds: first, in the early implementation years of the Education and Training Policy (1994), I was a primary school teacher, second, in less than a decade, I became a teacher educator to train primary school teachers and the duty continued for more than a decade; and third, I have been working as a researcher in a national research center mandated to study policy issues in education where I have conducted policy relevant research works on teacher education, especially on primary schools. Thus, I believe that I am one of the informed ones to tell others about the issue in the context of primary schools.

The case study design has many variants (Yin, 2018; Schwandt and Gates, 2018; Flyvbjerg, 2011; Mills et al, 2010; Woodside, 2010; Hancock and Algozzine, 2006; Gillham, 2000; Bassey, 2006; and Stake, 1995). Of the variants, I employed instrumental case study²⁶ (Yin, 2018; Stake, 1995) since the etic issue²⁷ is to understand the phenomenon I was interested in. And, by design it is a collective multiple case study design (Hancock and Algozzine, 2006) since my intension was to understand how the case schools learnt the reforms including the factors that fostered or inhibited this learning. With regard to unit of analysis, Fullan (2007, p.95) argues ‘the school is the unit of change.’ This is because, public policies ‘focus on the collective rather than individual level’ (Yin, 2014, p.13) so does reforms in education. Consequently; in this study, schools as macro level learning agency in OL was the major unit of analysis, but this does not mean that I excluded communities in it (Gondo et al., 2010). This is because; in the words of Bachelard (1969, cited in Whitehead and McNiff, 2006, p.38) “a study of a house, is inevitably also a study of the persons who live in it.” The multiple case study design was chosen over single case design since multiple-case study designs are likely to be stronger than single-case study designs (Yin, 2018; Stake 1995). According to Yin (2014, p.26), “trying to use even a "two-case" design is a worthy objective, compared to doing a single-case study”

3.3.3 Case selection

Selection of a case is considered critical in case study research (Yin, 2018; Mills et al, 2010). The relevance of the case (s) for the research objective is the most important criterion for selection. Besides, selection of case/cases is strategic instead of being random (Mills et al, 210); this makes the sampling strategy theoretical sampling (Charmaz, 2006). Accordingly, two primary schools were selected from the targeted region to increase transferability of the findings, and the selection of cases for qualitative study was decided based on the results of the quantitative survey. Specifically, two schools (one best performing and the other least performing) were selected based on the performance evaluation result conducted every three years vis-à-vis the school standard evaluation criteria endorsed by the federal Ministry of Education (2014). This criterion was used to select the cases since the quantitative survey result showed a statistically significant difference in the magnitude of being a learning organization

²⁶ Understanding the issue/phenomenon is more focused and the case is selected to understand the phenomenon (Yin 2018)

²⁷ Etic issue is an issue for a researcher, and sometimes the issue of a research community (Stake 1995)

due to the difference in the above-mentioned evaluation result (Tadesse and Kenea, 2023). Moreover, schools which participated in both approaches have been functioning since the 1994 or prior to that; and deployed veteran teaching staff who are familiar to the issue under investigation from the very beginning.

3.4 Data Sources

The study used primary data sources collected from field study (using questionnaire, interview of teacher team-ups, and school leaders) and secondary data sources from systematic review of research works published on education/curricular reform tradition, documents stored in the case schools, and publications by multilateral organizations).

3.5 Sampling techniques

The study employed a multi-stage sampling technique, combining both qualitative and quantitative approaches to ensure comprehensive and representative data collection. First, a systematic literature review was conducted, drawing on 35 peer-reviewed articles and 4 documents from multilateral organizations. These documents were selected from an initial pool of 87 articles using specific inclusion criteria: publication in reputable journals, nationwide scope, and a focus on educational, curricular, or instructional reforms endorsed in the post-1994 period. This rigorous selection process ensured that only the most relevant and high-quality sources informed the study.

Table-3.1: Number of schools functioning before or at 1994 per administrative zone

No	Zone	Population (N)	Sample (n)	Teachers (n)		
				M	F	T
1	North Shawa	57	17	135	135	270
2	East Gojjam	53	16	172	166	338
3	South Gondar	50	15	88	89	177
<i>Total</i>		<i>160</i>	<i>48</i>	<i>395</i>	<i>390</i>	<i>785</i>

In the quantitative phase, sampling began with the random selection of three Zones out of fifteen administrative Zones, to capture geographic diversity. Within these zones, 20 woredas were selected using stratified sampling, ensuring representation across the three zones. From each selected woreda, 30% of the schools were randomly chosen, resulting in a total of 48 schools for the survey. From these schools, 5% (785, F=390) of the teachers were randomly selected to fill

in the questionnaires. The percentage of the sample units for the survey participants was determined based on Gay, Miles, and Airasian (2011) proportions as shown in Table-3.1 above.

For the qualitative phase, two case schools were purposively selected based on the results of the quantitative survey, focusing on schools that exhibited distinct or noteworthy characteristics from the point of view of learning the post-1994 instructional reforms. Care was taken to ensure that teachers from different departments and all academic streams were represented in the sample. Additionally, school principals from each selected school were purposively included to provide leadership perspectives relevant to the study. This multi-layered sampling approach ensured both the breadth and depth of data, enhancing the validity and reliability of the research findings.

Table-3.2: Participants selected from the case schools (N=12)

School	Participant	Position	Qualification	Experience in years	
				Total	In the school
Case-1	P1	Principal	BA in EDPM	23	11
	P2	Teacher	BSc in Sport science	37	9
	P3	Teacher	Diploma in Science	33	11
	P4	Teacher	Diploma in Mathematics	20	6
	P5	Teacher	Diploma in Mathematics	19	7
	P6	Teacher	Diploma in Special needs	16	7
	P7	Teacher	BA in Language (Amharic)	23	3
<i>Average working experience</i>				24.42	7.71
Case-2	P8	Principal	MA in ECCE	15	9
	P9	Teacher	Diploma in Aesthetics	12	2
	P10	Teacher	BSc in Biology	23	5
	P11	Teacher	Diploma in Mathematics	23	5
	P12	Teacher	Language (English)	13	2
<i>Average working experience</i>				17.2	4.6

3.6 Research Methods

3.6.1 Data Collection Methods and Procedure

The quantitative data was collected using a standard questionnaire developed based on Huber (1991) and Stoll and Kools's LO conceptions. The first was used to measure the thinking dimension of OL and it was adapted to the school context and validated by Park (2006). This tool was used by Panagiotopoulos, Zogopoulos, and Karanikola (2018)²⁸ to study OL in school context. The second was developed by Kools and Stoll (2017) to measure the action dimension of OL, and it was used by OECD to study OL in school context.

²⁸ Validated in 31 primary schools based on data collected from 227 teachers in Greece

Accordingly, the reliability co-efficient (Cronbach alpha) from a pilot test for both the scale and the sub-scales were found to be between 0.70 and 0.96, which is greater than the threshold value suggested by Shemwell, Chase, Schwartz (2015), which is 0.70. The full item contains 19 items for measuring the thinking dimension (T-Dimension) and 33 items for measuring the Action Dimension (A- Dimension) with Likert scale options ranging from 1 (Completely disagree), 2 (Disagree), 3 (Undecided), 4 (Agree) to 5 (Completely agree).

Table-3.3: Summary of reliability coefficients of the scales and sub-scales of the questionnaires

Scale/sub-scale	Cronbach Alpha
<i>Construct Measure</i>	
Knowledge acquisition	0.84
Dissemination	0.76
Interpretation	0.70
Memory	0.80
Sub-scale Aggregate	0.92
<i>Characteristics Measure</i>	
Developing a shared vision centered on the learning of all students	0.80
Creating and supporting continuous professional learning for all staff	0.85
Promoting team learning and collaboration among all staff	0.81
Establishing a culture of inquiry, exploration and innovation	0.83
Embedding systems for collecting and exchanging knowledge and learning	0.81
Learning with and from the external environment	0.75
Modelling and growing learning leadership	0.85
Sub-scale Aggregate	0.96

These items were adapted to the research context (Ethiopia) and the problem area (instructional reform), and then translated into Amharic language, and then these versions were translated back to English-by-English language expert to improve reliability of the items (Watkins and O'Neil, 2013). Then, the two versions (original English versions and the questionnaires translated from Amharic versions) were checked for equivalence by two language experts (Appendix-2). Finally, revisions were made on the Amharic versions based on the comments on the congruency of the original and translated English versions, and pilot tested in a primary school.

The qualitative data was collected using interview (Appendix-3) and document review because case study research involves an eclectic mix of data collection methods and data sources (Schwandt and Gates, 2018; Yin, 2018; Mills et al, 2010; Woodside, 2010; Bassey, 2006).

Moreover, data collected using these methods provide the opportunity in understanding “the case from different angles and perspectives” (Mills et al, 2010, p.274).

Interview is very common method of data collection in case study research (Mills et al, 2010; Hancock and Algozzine, 2006) to get into the participants’ emic mental model accounts (Woodside, 2010). Hence, I conducted interviews with school leaders and teachers in the case schools.

With regard to the specific issues to address in the interview sessions, guiding questions that allow gaining insights into the study’s fundamental research questions were developed. These questions took semi-structured format because that is well-suited for case study research (Hancock and Algozzine, 2006). In the course of interviewing, maximum effort was made to make the interview setting suitable to the interviewees. Consequently, it was conducted in a way that keeps the comfort of the interviewees and the likelihood of attaining high-quality information (ibid).

Second, case study research utilizes a range of historical and contemporary documents (Mills et al, 2010). In addition, the theoretical lenses through which I examined the learning of post-1994 instructional reforms in primary schools also necessitate the critical examination of historic and contemporary documents produced within the time range. Accordingly, relevant documents produced and stored in the case schools were reviewed.

The quality of the qualitative data was managed using the methods suggested by Yin (2014); that is by: (i) using multiple sources of data and (ii) establishing chain of evidence. The prime purpose of these measures is to maintain trustworthiness, credibility, confirmability, and data dependability.

3.7 Methods of Data Analyses

The method of analysis was tailored to the research questions framed in chapter one of this study. Hence; to analyze the data collected from previous publications on reform approach, I employed thematic synthesis, a category of SLR often employed when predefined research questions are answered using thematic analysis (Thomas & Harden, 2008; cited in Xiao & Watson, 2019). Consequently, criteria of comparison (themes) emerged via descriptive coding

technique (Saldana, 2013). Specifically; each paper was scanned for content and descriptive codes were given manually to the findings. Next, major findings were tabulated to obtain repetitive patterns and consistencies across the papers reviewed.

Second, the survey data collected to answer the magnitude of being a learning organization were analyzed quantitatively using descriptive and inferential techniques. Accordingly, percentage, frequency count, and mean values were used for the descriptive analysis. Besides, independent samples t-test, one-way ANOVA, and multiple regression were used to infer about the population. A statistical software (SPSS Version-27) was used to analyze the quantitative data.

Third, the data collected from case schools on the how of learning the reforms and the factors fostering or hindering this learning were analyzed qualitatively using various techniques. This is mainly because analysis in case studies employ different techniques to “create mental images that bring to life the complexity of the variables inherent in the phenomenon being studied” (Hancock and Algozzine, 2006, p.16). Thus, to condense and summarize the qualitative data, I employed different data coding methods suggested by qualitative research scholars (Denzin and Lincoln, 2018; Merriam and Tisdell, 2016; Patton, 2000; Saldana, 2010; Miles and Huberman, 1994), and especially to case study research (e.g., Yin, 2018; Merriam and Tisdell, 2016; Stake, 1995).

First, interview data collected from learning agencies in case schools were recorded and transcribed verbatim (Appendix-4) by the researcher since this would help to generate insights about the data (Merriam and Tisdell, 2016). Second, to understand the interview data the transcription was repeatedly read. Third, initial open coding in the form of descriptive and in vivo coding followed by axial coding (Merriam and Tisdell, 2016; Saldana, 2010) were applied to regroup the sub-codes and codes into categories. Fourth, selective coding (Charmaz, 2006; Merriam and Tisdell, 2016) was employed to generate the core categories (themes and concepts). Data from document review and observation were coded, categorized and thematized in a similar manner. While analyzing the qualitative data, patterns, consistencies, similarities, and differences and relationships were identified (Saldana, 2013; Hatch, 2002; Stake, 1995) within and between the cases studied.

Then, the data from the cases were analyzed first case by case, and then using cross-case analysis along the core categories so as to develop rival hypotheses that can stand against the mainstream discourse of post-1994 instructional reforms or to confirm the already existing hypothesis. While interpreting the data, bracketing was employed so as to put aside own preconceptions (Patton, 2002); but it is neither possible nor recommended to avoid subjectivity since it is “an essential element of understanding” especially in qualitative research (Stake, 1995, p.45).

3.8 Ethical Considerations

The study followed the ethical code of conduct specified by the APA (2020): informed consent, non-deception, absence of any harm, privacy and confidentiality, and a commitment to collecting and presenting reliable and valid empirical data. Besides, ethical considerations prescribed by the host University (AAU) were followed by the time of data collection, analysis and dissemination of the results.

Consequently, participants were briefed on the purpose of the study and up on confirmation of willingness to provide data, data were collected using the above-mentioned tools. Specifically, to maintain the issue of confidentiality, participants were informed not to mention their names while filling the questionnaires. Moreover, the site observation and document review were made after getting approval from the case schools and team of teachers. Audio recording and taking pictures via mobile camera and other devices were undertaken after getting approval of the participants. The information received from interviewees and documents were presented confidentially in the entire research process.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

Introduction

In this section, I present a comprehensive analysis of the data collected during the research process, aimed at exploring the learning of post-1994 instructional reforms in primary and middle schools. The primary objective of this analysis is to provide insights into how the post-1994 instructional reforms were introduced and how primary and middle schools were built into learning organizations in learning the reforms. Specifically, the research tried to answer the following research questions: i) how the post-1994 educational reforms, in particular instructional reforms were introduced? ii) To what extent primary and middle schools in the target region have learnt the instructional reforms? iii) How case schools learnt the instructional reforms such as active learning, continuous assessment, action research, and reflective practice? iv) What factors do foster or hinder organizational learning in the case schools?

To answer the research questions stated above, the study applied a sequential mixed research design in the following way: first, by using change theories, I tried to analyze education reform documents which have been introduced in the last three political regimes in Ethiopia namely: Imperial regime of Haile Selassie-I (1916-1974), Derg regime (1974-1991), and EPRDF regime (1991-2018), and research works conducted so far on the issue were the data sources. A total of 87 publications and documents were accessed; however, publications which are conducted in specific geographical areas of the country and publications in non-reputable journals were excluded due to lack of comprehensiveness and trustworthiness respectively. The selection of documents was based on the priority areas. That is, documents which underscore on the reform approach, purpose of reforming education, priority areas emphasized while reforming, strategies set to accomplish purposes, and on the actors in the reform process were selectively reviewed. Consequently, a total of 39 research works were screened for review. The SLR employed thematic synthesis, a category of SLR often employed when predefined research questions are answered using thematic analysis (Thomas and Harden, 2008; cited in Xiao and Watson, 2019). This article is published in the Ethiopian journal of education and sciences, V.17, No.2, 1-17, <https://ejhs.ju.edu.et/index.php/ejes/article/view/4023>

Second, a survey of 48 randomly selected primary schools was conducted in 20 woredas (three zones) of the Amhara regional state to assess the extent to which the schools were built into a LO, particularly in learning the instructional reforms, and these was made by using OLT as a theoretical framework. Standard questionnaires (measuring the constructs and characteristics of a learning organization) developed based on Huber (1991) and Kools and Stoll (2017) were employed after adapted to and piloted in the Ethiopian school context. And, this article was published in the Bahir Dar Journal of Education, V.24, No.1, 124-146.

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Third, two case schools were purposively selected based on the results from the quantitative survey; and deep investigations were made to understand the mechanisms of organizational learning applied by the case schools in the process of learning the instructional reforms. Moreover, I tried to understand the factors that foster or hinder organizational learning in the case schools. And a pilot of these two issues is published in the journal of Cogent Education, V.9, No.1, <https://doi.org/10.1080/2331186X.2022.2074343>. Moreover, I read different books to understand the role of action research for building professional learning community, and I published the review of one of these books in the Bahir Dar Journal of Education, 23(3), 145–150. <https://doi.org/10.4314/bdje.v23i3.9>

4.1 Tradition of reforming education and curriculum in Ethiopia

The very purpose of this sub-section was to understand how the post-1994 instructional reforms were endorsed, but educational reforms introduced to direct the general education sub-sector in the last eight decades were systematically analyzed so as to give historical background to the education reform tradition in Ethiopia. These reforms are education and curricular changes initiated during the Imperial (1916-1974), the Military (1974-1991), and Ethiopian People's Revolutionary Democratic Front, EPRDF (1991-2018), regimes that ruled over Ethiopia in the last eight decades. Recently, a new education reform has been endorsed following another political reform in 2018. Therefore, findings from the present review could provide lessons to help to rethink the various reform approaches followed in the history of the country's modern education. The analysis focuses on answering how the reforms were introduced into the education system; but along with this, I tried to answer the constituent features of the education reforms common to the three political regimes.

To answer this question, a total of 87 publications and documents which meant to address education and curricular reforms in the entire education sector of the country were accessed. However, reforms introduced to direct education sectors other than the general education sub-sector were excluded. In addition, neither publications which are conducted in specific geographical areas of the country, nor those conducted by NGOs, and papers published on specific subject matters like language, science, mathematics, and papers published in non-reputable journals were included in this review. The selection of documents was based on the priority areas; as a result, documents which underscore on the reform approach, purpose of reforming education, priority areas emphasized by regimes, strategies set to accomplish purposes, and on actors in the reform process were selectively reviewed.

Consequently, a total of 39 research works (35 articles published in peer reviewed journals and monographs and 4 policy researches conducted by the Ministry of Education, Education Strategy Centre and the World Bank) were screened for review. The review employed thematic synthesis, a category of SLR often employed when predefined research questions are answered using thematic analysis (Thomas and Harden, 2008; cited in Xiao and Watson, 2019). Consequently, criteria of comparison (themes) emerged via descriptive coding technique (Saldana, 2013). Specifically; each paper was scanned for content, and descriptive codes were then given manually to the findings. Next, major findings were tabulated to obtain repetitive patterns and consistencies across the papers reviewed. Finally, five major themes namely: reform approach, purpose, priority, strategy, and actors were emerged as criteria of comparison.

4.2 Reform approach and the constitute features

This section presents an analysis and interpretation of how the reforms initiated in the last three regimes have been consistent with organizational change literature. Consequently, Chin and Bennes's (1994) strategy of effecting change was applied as a conceptual analysis framework. By applying this analysis framework, therefore, I tried to seek answers for the research questions framed in section one of this dissertation: How were the educational and curricular reforms introduced into the education system of the country? What were the constituent features of the educational reforms common to the three political regimes? The summary of each regime vis-à-vis these criteria is given in the table below.

Table 4.1: Synthesis of reform approach and reform elements across political regimes

Criteria	<i>Imperial</i>	<i>Military</i>	<i>EPRDF</i>
Reform approach	➤ Education reforms were top-down prescriptions from the government, in fact suggested by foreign experts (Negash, 2006; Balsvik, 2005; Messay, 2006; Mengistie, 2021, Wodajo, 1959)	➤ Education proclamations were given by the Workers' Social Party and curriculum development was dominated by experts from East Germany (Negash, 2006; Tefera, 2005)	➤ The policy has been formulated without genuine participation of main stakeholders (Tefera, 1996 and 2005; Abebe, 2011). It has been spearheaded by the PM office, MoE, and donors (Abebe, 2011). The policy of teaching using mother tongue was also more of a political imposition than a pedagogical one (Honig, 1996; Wagaw, 1999) ➤ Curriculum development in Ethiopia neglects the participation of key stakeholders, especially teachers (Melese & Tadege, 2019; Abie et al., 2023) ➤ The three political regimes differ in ideology but, there was "strong continuity in their hierarchical and exclusionary nature" in policy formulation (Gershberg, Kefale, and Hailu, 2023, p.48)
Purpose	➤ prepare a dynamic society that is alert and responsive to development measures [of the country] (see also Eshete, 2021 about the assertion made on the three regimes)	➤ mould citizens who have an all-rounded personality [and] arming them with the required knowledge	➤ Cultivate citizens with an all-round education capable of playing conscious and active role in the economic, social, and political life of the country (MoE, 2002, p.15)
Priority	➤ Access, quality, equity, relevance, efficiency (Negash, 2006; World Bank, 1990)	➤ Access, quality, equity, relevance, minimum wastage (Mekuria, 2009; Tefera, 2005; World Bank, 1990)	➤ Access, quality, equity, relevance, efficiency (MoE, 1994)

Strategy	➤ Competent teachers and school administrators, curriculum, and resources (World Bank, 1990)	➤ Competent teachers and school administrators, curriculum and resources (World Bank, 1990)	➤ Competent teachers and school leaders, curriculum, and resources (MoE, 1994)
Actors	➤ Experts from Europe and the USA dominated the education system (Negash, 1996). 51 Ethiopians and 30 international experts studied ESR (Negash 2006)	➤ Educational experts from Eastern Germany dominated the regime's education system (Tekste 2006). ERGESE which was conducted by a total of 61 taskforce members was financed by UNICEF, World Bank and the Swedish International Development Authority (Tefera, 2005; Negash, 2006)	➤ 44 Ethiopian nationals from MoE, AAU and other government offices were recruited to design the ETP (Tefera, 2005). 25 professionals for preparing TESO, 11 of which were foreign experts (MoE, 2003). Sexuality education in Ethiopia is largely a donor driven agenda (Le Mat et al., 2020). There exist considerable degree of agreement between donors' agenda and national reform documents (Takala, 1998) ➤ The World Bank influence on Ethiopia's education reforms increased across regimes (Molla, 2019). ➤ Public and professional engagement in curriculum development is little or totally missed in most phases of modern education (Kassaye, 2005) ➤ Stakeholder involvement in education policy has been uniform across the three regimes in that education policymaking has been largely the business of the governing elite (Gershberg et al., 2023, p.51)

4.2.1 Major Findings

Reform approach

The power-coercive, empirical-rational, and normative-reducative are change strategies coined by Chin and Benne (1994). The three strategies differ in the kind of relationship that exists between change initiators and implementers. Consequently, the more democratic is the relationship between change initiators and implementers; the higher is the likelihood to include voices from grassroots' level implementers. On the contrary, the more autocratic is the relationship between the two, the higher will be the likelihood for implementers to comply with the demands of change initiators. While the first one is normative-reducative strategy, the second is termed as power-coercive strategy. A change strategy that is based on modest power relationship between authorities and practitioners is termed as empirical-rational (Quinn and Sonenshein, 2008).

Western-based education in Ethiopia, which is commonly called modern education, has traditionally been experienced policy change following the demise of old regime from power (Negash, 2006; Abebe, 2011). Consequently, the regimes in Ethiopia including the present regime formulated their own educational reforms once they succeeded to political power. Hence, based on the analytical framework, I attempted to answer how the three political regimes in Ethiopia approached reform process using conceptual lenses from Chin and Bennes (1994) and Fullan (2007).

To start with the imperial regime, a series of reforms which were presumed to make education contribute for economic development of the country were introduced, especially after the end of Italian occupation in 1941. Mengistie (2021) who studied the history of education policy formulation in Ethiopia asserted that reforms formulated during this regime had limited input from key stakeholders. This finding is supported by different scholars who studied the issue (Messay, 2006; Negash, 1996; Abebe, 2011; Gershberg et al., 2023). The Western countries (Messay, 2006), and especially the multilateral organizations like the World Bank (Molla, 2019) were the sources of these reforms; Balsvik's (1979) observation, quoted by Messay (2016) clearly supports assertion as below:

The most important characteristic of the entire set-up of modern education in Ethiopia was that it was imposed from the UK, the USA, and influenced by various other European countries, and thus essentially constructed to serve a different society than the Ethiopian one (Balsvik, 1979, Quoted in Messay, 2006, p.12).

The successive reforms introduced to structure the Ethiopian education since 1947 were proposed by British and American experts (Mengistie, 2021; Kassaye, 2005). Not only the structures, but also the prospective education plan (1961-1973) which aspired to markedly improve education hitherto provided, was suggested by foreign advisors (World Bank, 1990). Even the first proclamation, which was enacted to introduce modern education, gained legitimacy through the force of law (Mengistie, 2021); in fact, this is not surprising since the country was seen as ‘rudimentary’ so as to be able to initiate reform ideas, other than which was already known to them.

The military regime is characterized by successive proclamations which were meant to reform Ethiopian education in line with the socialist ideology (Negash, 1996; Messay, 2006). One of these proclamations was ratified in 1975 to provide ‘New Directions to the Ethiopian Education’ (World Bank, 1990). These proclamations were impositions of the military regime (Tefera, 2005) initiated with no participation from main stakeholders of education such as teachers and other grassroots level practitioners, indeed rather imposed.

The downfall of the military regime followed a new education policy commonly known as the Ethiopian Education and Training Policy (1994). Although MoE (2002) and Zewudie (2018) claim that preparation of the ETP was participatory; scholars who studied the issue conclude its conceptualization and formulation, like its predecessors, had followed an ‘opaque model’ of policy formulation (Abebe, 2011; Tefera, 1996 and 2005; Gershberg et al., 2023). Even before the ETP, there was a de facto education policy which was in action since February 1993, and this de facto policy is thought to be the handmade initiative of the Prime Minister Office (PMO), funding agencies, and the Ministry of Education (Abebe, 2011; Negash, 1996). Abebe adds that not only the ETP but its directives (such as the Education Sector Development Program, ESDP) were initiated and endorsed by the government without genuine participation of the main stakeholders. Similarly, the decision to introduce mother tongue as a medium of

instruction was more of a political imposition of EPRDF than a pedagogical one (Honig, 1996; Wagaw, 1999).

A further pertinent assertion about the process is given by Tefera (2005); who noted the limited participation of stakeholders in discussions organized to enrich the draft ETP. Nonetheless; from a policy research point of view, he describes, the intent of participation as ratificatory not formative, being to ‘‘simply endorse the draft in its entirety rather than serving to contribute to the enrichment of the policy, a process that calls the motives of the discussion into question, p.28’’. This is not surprising since public policy making in other sectors over the years and in education sector in particular had little engagement of stakeholders other than those who controlled the political scene (Kassaye, 2005; Abebe and Cloete, 2006; Abebe, 2011). Little input or ownership of these policies from the main stakeholders such as teachers led to resistance against reform (Achinstein and Ogawa, 2006) and, consequently, to the failure of reform implementation (Mengistie, 2021).

Similar to the ETP (1994) and the directives, the curriculum design and development approach followed the prescriptive approach (Melese and Tadege, 2019; Abie et al., 2023; Kassaye, 2005) without stakeholder participation, particularly school-level implementers. This confirms the incessant infiltration of politics into the country’s education in general and reform per se in particular. Specifically, textbooks, manuals, teaching aids, and support materials were donor prescriptions provided through the GEQIP (2009-2013) support (Berry and Bogale, 2011). Personal observation of the curricular materials also shows that post-1994 instructional reforms such as active learning, continuous assessment, reflective practice, and action research manuals have been developed by professionals from the American Institute of Research (AIR).

Seen from Chin and Bennes’s (1994) change strategy and Fullan.s (2007) change theory, all the three political regimes, though radically differing in ideology (Negash, 1998), seem to incline to the power-coercive strategy and the top-down approach when they initiate educational reforms. Three premises support this conclusion: (i) the reform ideas were prescriptions from those who assume political power to exercise with little or no consensus from implementers (Sidorkin and Warford, 2017; Nichols, 2016; Quinn and Sonenshein, 2008); (ii) government enforced grassroots-level practitioners/voiceless to faithfully implement the reforms (Abebe and Cloete, 2006; Abebe, 2011; Melese and Tadege, 2019); and (iii) on incidences of failure, the

voiceless are themselves blamed and castigated (Akalu, 2014). This implies that the tradition of reforming curriculum in particular and education in general had little changed in the last three regimes; it follows the power-coercive strategy and a top-down approach to change. This might be because of the fact that successive regimes in Ethiopia had a firmly embedded belief that ‘‘successful change is based on the exercise of authority and the imposition of sanctions’’ (Nichols, 2016, p.3).

When reason and data guide practitioners to implement educational reforms, the approach is termed as empirical-rational (Bonner and Langmeyer, 2004; Quinn, 2004; Chin and Benne, 1994). Since the early 1970, there was an attempt to initiate educational and curricular reforms using this strategy. National studies such as the Education Sector Review, ESR (MoE, 1972) and Evaluative Research of the General Education System of Ethiopia, ERGESE (1986), and recently the Education Development Roadmap, EDR (2018) were attempts of this kind. These grand research projects were meant to provide rational justification and clear demonstration of the change to grassroots level implementers. Unfortunately, the recommendations from ESR and ERGESE remained shelved (Negash, 1998) as a result of fierce resistance (ESR) and acute shortage of resources to implement the suggestions (ERGESE).

ii). Constituent features (characteristics) common to three of the political regimes

In a power-coercive strategy to change, government is the sole proprietor to initiate and institutionalize the reform idea, and the one who is responsible to decide over all matters of the reform (Burch, 2007) including the constituents. The findings resulted from this review (*see inter-regime analysis matrix in Table-4.1*) reveal that purpose, priority area, strategy, and reform actors have been common issues. In this sub-section, therefore, I attempt to elaborate the findings synthesized from previous local research works.

Every nation, based on its socio-economic status, political ideology, culture, and global trends, defines the purposes for education it provides. This purpose may change over time depending on various conditions prevailing at Glocal level (global and local) (Francois, 2015). The Ethiopian education system traditionally experienced reform following regime change (Negash, 2006; Tefera, 2006) to endorse a new policy, directives, and curriculum, and this is also true in the recent political reform. Consequently, the three regimes who controlled political

power in the last eight decades had set purposes for the education they had provided. Critical observation on the purposes that each regime aspired to provide shows that the mission of preparing the generation for a distant future was left intact.

During the imperial regime, for instance, the primary role of education was to “**prepare** a dynamic society that is alert and responsive to development measures [of the country]” (MoE, 1972, p.ii). The military regime in turn aspired to “**mold** citizens who have an all-rounded personality [and] arming them with the required knowledge” (MoE, 1986, p.3). Similarly, the EPRDF sought to **cultivate** citizens with an all-round education capable of playing conscious and active role in the economic, social, and political life of the country (MoE, 2002, p.15) [Emphases added]. To **create** a competitive citizen who responds to the current conditions in all levels and education sub-sectors (general education, technical and vocational, university) (MoE, 2023, p.4)

Thus, one can observe that these words (in emphasis) are synonyms and the country’s education system hitherto operating, albeit their irreconcilable ideological differences, appears similar with regard to the aims of education. Each had aspired to produce citizens with adequate skill of creativity and scientific inquiry who could function within the state ideology (see ESR, 1972; ERGESE, 1986; and ETP, 1994). This shows that *preparing* citizens for a better personal and common goal each has defined in the distant unknown future was the aim of education (See also Eshete, 2021).

The resemblance might be due to entrenched tradition of indoctrination which might have emanated from power-coercive strategy and prescriptive approach to change. This reform strategy was backed by the influence of same neoliberal funding agencies who supported research project undertakings and formulation of policy directives across the three regimes (Mekonnen, 2013). Critical examination of research projects, prospective plans, and proclamations enacted in the education sector of the country, shows the age-old dominance of the World Bank, UNESCO, and USAID (see World Bank, 1990; Negash, 2006 and 1996; Mekonnen, 2013) in reforming the country’s education. The same funding agencies not only dominated mainstreamed curricular and education policy issues but also crosscutting issues. Le Mat et al. (2020), for instance, found out that sexuality education in Ethiopia is a donor driven agenda which culturally not congruent with the local one.

With regard to priority areas, the three regimes seem to focus on similar priority areas which the education system is committed to address. Analysis of the objectives of the third five years' prospective plan (1968-1973) (quoted by the World Bank, 1990, p.42) shows expanding access, narrowing urban-rural gap in enrolment (equity), quality, relevance, and efficiency of education were top priority areas which the imperial regime planned to address. The objectives were to: (i) provide educational opportunity for an increasing number of people, and particularly for the rural population; (ii) provide an educational system which would be in harmony with Ethiopia's ancient cultural traditions; (iii) provide an educational system within which children can develop positive attitudes towards manual work and practical skills; (iv) place appropriate emphasis on the quality of education. According to the same source, the objectives had also aspired to improve the efficiency of the education system hitherto operating.

Access, especially to primary education, seems the concern of all the regimes; the imperial regime like other African states, for instance, adopted a resolution to accomplish Universal Primary Education until 1980 (Negash, 2006; World Bank, 1990); though this remained aspirational. This was also true for the military regime since there had been efforts to quantitatively expand access to primary education (Negash, 1996; World Bank, 1990).

Like the imperial regime, the military regime had also introduced a ten-year perspective plan which hoped, among others, to ‘produce skilled manpower in such numbers, proportions, and quality, [and] provide education which will meet the basic needs of the people’ (World Bank, 1990, Pp.84-85). The words/phrases like ‘in such numbers’, ‘proportion’, ‘quality’, and ‘basic needs’ implicitly or explicitly refer to access, equity, quality, and relevance respectively. Other scholars also reported similar findings, especially on the position of the military regime in prioritizing access (Mekuria, 2009; Tefera, 2005; MOE, 1986) and equity (Mekuria, 2009; Negash, 1990). The issue of wastage, which is an indicator of inefficiency, was also among the priority areas on which the military regime aspired to curve out (MoE, 1986).

Similar to reforms in other two regimes and more vividly, the ETP has identified access, equity, quality, relevance, and efficiency as its priority areas, for which the regime strongly criticized its predecessors and promised to commit itself (see Negash, 1996; Mekuria, 2009). However, these are not unique to the ETP; its predecessors also pinpointed these issues either

tacitly or explicitly, and envisioned to address them altogether, though the gap between rhetoric and reality on the ground continuous widening.

The third common place is about strategies designed to realize the purposes emphasized in successive educational reforms. Syntheses of the researches included in this review reveal that curriculum, teachers, school leadership, and resources initiatives have been among the major common strategies. The policy documents in each regime have plenty of prescriptions regarding these issues. Negash (2006), for instance, argues that the upgrading of teacher competence in teaching methodology/instruction and subject matter has been the concern of the education reforms across regimes.

Educational reforms enacted during the imperial regimes also prioritized the strategies; between 1947 and 1963, the country had experienced four different education structures, within each reform, curriculum, teachers, and resources were critical elements (Mengistie, 2021). Even prior to these reforms, curriculum reform proposed by Professor Ernest Work suggested teacher education to be one of the top priority areas (Mengistie, 2021), and hence a teacher training institution was opened (See Semela, 2014).

Similarly, during the military regime, these issues were the major thematic areas of an extensive evaluative research; it states “curriculum and teaching-learning process; administration, ...and logistics” are among the areas of concern for school quality (MoE, 1986, p.iv). This is because the technical team which conducted ERGESE, directed by the military regime, set the evaluation around these issues (Mengistie, 2021). Consequently, in one way or another, the strategies suggested to materialize the goals of the then education from ERGESE seem very familiar to that of the imperial regime; that is, developing context-friendly curriculum, staff schools and the sector with qualified personnel, and fulfilling resources which are required to implement the reforms.

The ETP has also adopted these strategies as pillars of achieving the objectives set in the policy (MoE, 1994). One can scan the policy document and understand the emphasis given to these strategies; each of them has been well elucidated in separate sections. The directives prescribed by MoE to further elaborate the policy have also emphasized on these strategies to accomplish the objectives of the ETP. The intention of the policy was to transform the education

system hitherto given (Tefera, 2005); but the strategies through which the government aspired to transform education little differs from the strategies of the preceding regimes. Teaching using mother tongue, which reforms in the preceding regimes lacked, is also a strategy imposed by the government to implement the policy (Honig, 1996; Wagaw, 1999; Boothe et al., 1997).

To conclude; curriculum, teachers, and resources were placed at the centre of the strategies set to realize the purpose of education in three of the regimes. They all aspired to recruit teachers and school leaders from able applicants, introduce a curriculum which is tailored to the country's context, and to fulfil the resources which are needed to implement the reforms. Indeed, it can be argued, there is nothing wrong in utilizing these strategies as means of achieving the objectives of the reforms; but the problem seems to be inadequate results falling short of that aspired to in rhetoric. In Ethiopia, there is a tradition of criticizing older regimes for policy pitfalls they committed; with a cyclical recurrence of the new regime repeating the pattern and falling into the same criticism at its downfall.

The other constituent which is common to all the regimes was the types of main actors in initiating the successive reforms. Synthesis of previous research works, which are included in this review, shows donor agencies and policy elites in the three regimes pervasively dominated educational reforms since the time of its introduction (Takala, 1998; Tefera, 2005; Gershberg et al., 2023). The continuous dominance of funding agencies and source nations is best described in sequence by Tefera as "first came the French, then British followed by Americans, then Russian, and, now, indirectly through the World Bank, Americans, once again," (2005, p.34).

Thus; during the imperial regime, the education system was dominated by Western allies; especially by experts from Europe and the USA (Negash, 1996). For example, after the evacuation period (1941), education—particularly curriculum development—came under the control of British experts. Consequently, the curriculum, including textbooks and the education structure used, were that of the East African British colonies (Mengistie, 2021).

During the military regime, the United States of America, one of the main partners in the development of the Ethiopian education sector during the imperial regime, was replaced by educational experts from Eastern Germany (Tekste 2006, p.18). ERGESE was financed by UNICEF, the World Bank, and the Swedish International Development Authority (Negash,

2006). Teachers, parents, and the society at large had no, or at best an extremely limited, voice (Abebe, 2011; Abebe and Cloete, 2006).

With regard to education reforms enacted during EPRDF, teachers from Addis Ababa and some regions of the country had participated in workshops organized on the draft ETP (Gershberg et al., 2023; Zewudie, 2018). Similar approaches were also followed in the successive reforms initiated to translate the policy (Zewudie, 2018; Tefera, 2005). Nevertheless, research works show that little changed in the power relations between policy elites/donors and main stakeholders such as teachers. That is, the intent of inviting teachers and other stakeholders seemed more that of endorsement of the draft in its entirety; but not its enrichment (Tefera, 2005). Even TESO, a binding document that translates the intents of the ETP (1994) into operation level statements and a mother board for other instructional reforms that comes after, was a top-down prescription from government and funding agencies. Consequently, it directs how teaching and assessment in teacher training institutions should be conducted (Mekonnen, 2008). In fact, workshops have been organized at national and regional level to familiarize teachers with the new reform ideas, but without changing the original intent of TESO (Mebratu and Hoot, 2005).

Thus, it seems that funding agencies had more voices than main stakeholders in influencing post-1994 educational reforms in general and instructional reforms in particular. This can be confirmed by looking into the TESO document; out of the 25 experts who drafted this document, 11 of them were foreign experts (See MoE, 2003)

The analysis by Takala (1998) disclosed a considerable degree of agreement between the donors' agenda and national reform documents both in context and content. The influence of foreign actors in reforming education is best described by Mengistie (2021) as follows: "foreign educational advisories who were not conversant with the in-house organic nature of the country usually recommend irrelevant experiences to the country's educational practice [which] has led us to invest our meagre resources on areas which have little contribution to the advancement of the country's educational system" (p.21)

The resemblance of education reforms (thought/enacted) in priority areas, strategies, and main actors is well described by Abebe (2011) in the statement quoted below;

The manner in which a group of expatriate and Ethiopian educators who drafted the Education Sector Review were assembled in 1972 (under Haile Selassie's Imperial regime) is as much the same as the one organized to draft the Evaluative Research of the General Education System in Ethiopia (ERGESE) in 1983 (Dergue government), and the Education and Training Policy in 1993 (the current government) (p. 267)

It was not only the reforming approach; but constituents of the reforms were under full control of the functioning government in the respective regimes. This is a unique feature of the power-coercive strategy to reform in which practitioners are thought to be compliant subjects who should do what they are told to do under imposed sanction and control from government (Leana and Barry, 2000). Thus, the resemblance among the regimes in the above-mentioned constituent features of educational reforms ever tried in the history of Ethiopian Education might be due to the fact that the power-coercive strategy to change is almost in the DNA of each of the regimes. The involvement of the same international actors from donor agencies might also be another reason for this resemblance. Severity of the poverty level in the country might also force the regimes not to initiate education and curricular reforms which could properly respond to the needs of the society they had ruled over.

4.3 Magnitude of being a learning school

As we have seen in the above sub-section, the post-1994 instructional reforms in particular, and the educational reforms in general were dominantly government provisions endorsed without significant participation from grassroot level practitioners. According to the organization learning theory, schools have to grow into a learning organization in order for such reforms to be successful. Thus, in this sub-section, I tried to assess the magnitude of being a learning school by taking 48 primary and middle schools randomly selected from three Zones of the Amhara national regional state. The data were collected by using standard questionnaires adapted by the researcher. Hence, this sub-section presents the findings from the field study under three themes: background information about sample units, the level of OL at the school, team, and individual levels, and analysis of variations.

5.2.1 Background Information

Teacher characteristics

A total of 785 teachers participated in the study; Table-4.2 below presents their characteristics in terms of biodata, location, and other teacher-related variables.

Table 4.2: Summary of Teacher Characteristics

Variable	Level	N	%
Sex	Male	395	50.3
	Female	390	49.7
Location	North Shawa	270	34.4
	East Gojjam	338	43.1
	South Gondar	177	22.5
Career ladder	Beginner	9	1.1
	Middle teacher	57	7.3
	Teacher	131	16.7
	High teacher	165	21.0
	Principal teacher	404	51.5
Teaching experience	High principal teacher	19	2.4
	<5 years	53	6.8
	5-10 years	194	24.7
	11-15 years	190	24.2
Qualification	>15 years	348	44.3
	10+1/12+1	28	3.6
	10+3/12+2	597	76.1
	1st Degree	151	19.2
Department	Others	9	1.1
	Language	214	27.3
	Mathematics	135	17.2
	Natural sciences	177	22.5
	Social sciences	107	13.6
	Aesthetics	95	12.1
	Generalist	24	3.1
	Missing	33	4.2
	<i>Total</i>	<i>785</i>	<i>100</i>

Source. Field data

Table-4.2 above presents the characteristics of the participant teachers. Accordingly, the share of male and female teachers who participated in the study was almost equal. Regarding location, the percentage of teachers who participated in this survey from North Shawa, East Gojjam, and South Gondar zones constituted 34.4%, 43.1%, and 22.1% respectively.

As far as their career ladder is concerned, the majority of participant teachers were promoted to high (21%) or principal teacher-ship (51.5%) ladders implying that they have been experiencing almost all of the post-1994 instructional reforms. The share of participant teachers who reached the teacher-ship career ladder constituted 16.7% of the respondents. However, respondents in other lower ladders like beginner (1.1%), middle teacher (7.3%) or higher ladders like high principal teacher (2.4%) were found lesser than the share of participant teachers in the other career ladder categories. This has implications to participant teachers' teaching experience since upgrading through the career ladders was practically based on years of teaching experience.

Qualification wise, the majority of teachers (76.1%) had diploma in teaching either in the 12+2 or 10+3 programs while 19.2% of the teachers had Bachelor's Degrees. The remaining teachers had either certificate in teaching (in the 10+1 or 12+1 programs) or joined the teaching profession without receiving any formal professional training.

Concerning the hosting departments, the majority (27.3%) were from the language department (Mother tongue & English) and the next higher share (22.5%) was from Natural Sciences. Teachers from the Mathematics department accounted for 17.2% of the respondents, whereas, teachers from Social Sciences (Civics & Social Studies) and Aesthetics (Visual arts, Music & Physical education) account for 13.6% and 12.1% respectively.

School Characteristics

Schools in Ethiopia, according to the school standard document endorsed by the Ministry of Education, are ranked under four categories (MoE, 2014), namely below standard (Level-I), beginner (Level-II), already functioning (Level-III), and above standard (Level-IV). According to this standard, the weights allotted to input, process, and output components are 25%, 35% and 40% respectively. Table-4.3 below reveals the characteristics of the sample schools.

Table 4.3: Summary of School- Related Variables

Variable	Level	Frequency	Percent
Number of Schools	North Shawa	17	35.4
	East Gojjam	13	27.1
	South Gondar	18	37.5
School level	Level I	0	0
	Level II	29	60.4
	Level III	19	39.6
	Level IV	0	0
Level of CPD Implementation	Very high	49	6.2
	High	135	17.2
	Average	466	59.4
	Low	93	11.8
	Very low	42	5.4

Source. Field survey conducted by the researcher between April and May 2022

As can be seen from Table-4.3, no school in the region was labelled under category four or category one; accordingly; about 40% of the schools surveyed were rated under Level-III (already functioning) and 60% of the schools was found to be Level-II (beginner) schools.

These sample schools, like in other schools, have been practicing the CPD program since it is a requirement for every teacher. But the result presented in Table-4.3 shows that the level of CPD implementation in those schools was perceived to be average or below as reported by 75% of the respondent teachers.

Status of being a learning school

Organizational learning in schools may take place at varying levels. It could happen at low, medium or high level depending on different variables. The results presented in Table 4.4 and Table-4.5 show the perceived level of practicing OL per LO dimensions.

Table 4.4: Level of Practicing Organizational Learning by School Levels (Thinking dimension)

Dimension	Sub-scales	Level-II		Level-III		Total	
		(N=465)		(N=320)		(N=785)	
		Mean	SD	Mean	SD	Mean	SD
Thinking	Interpretation	3.57	1.02	3.80	0.91	3.66	0.98
	Dissemination	3.32	0.92	3.59	0.80	3.43	0.88
	Memory	3.25	0.89	3.56	0.79	3.38	0.86
	Knowledge acquisition	3.17	0.79	3.42	0.72	3.28	0.77
	Average	3.33	0.91	3.59	0.81	3.44	0.87

Table-4.4 presents the schools' status in practicing the constructs of a learning organization exhibit the features of a learning organization in the thinking dimension, which was slightly above average ($\bar{x}=3.44$). The mean values for Level-II and Level-III schools were 3.33 and 3.59 respectively. As indicated in the same table, the sub-dimension of thinking followed a similar pattern across the school levels. Schools had higher mean values in knowledge interpretation and lower mean values in knowledge acquisition compared to other constructs of an LO. The mean values for knowledge dissemination and memory (storage) fall in between these two sub-dimensions, with a consistent pattern across school levels.

With regard to SLO characteristics, learning schools, according to Stoll & Kools (2017) possess seven features unique to SLO. Table-4.5 below presents level of SLO in the action dimension.

Table 4.5: Level of Practicing Organizational Learning by School Levels (Action dimension)

Action Sub-scales	Level-II		Level-III		Total	
	(N=465)		(N=320)		(N=785)	
	Mean	SD	Mean	SD	Mean	SD
DSV	3.65	0.96	3.94	0.78	3.77	0.90
CSPL	3.44	0.88	3.71	0.73	3.55	0.83
PTLC	3.38	0.98	3.65	0.76	3.49	0.90
MGLL	3.31	0.88	3.45	0.85	3.37	0.87
ESCEKL	3.24	0.89	3.47	0.76	3.34	0.85
ECIEI	3.20	0.90	3.47	0.79	3.31	0.86
LwfE	3.00	0.80	3.26	0.82	3.11	0.82
Average	3.32	0.87	3.57	0.76	3.42	0.84
Grand Average	3.33	0.89	3.58	0.79	3.43	0.86

The results show developing a shared vision which centers on learning (DSV), creating and supporting continuous professional learning (CSPL), and promoting team learning and collaboration (PTLC), were the three top SLO characteristics about which surveyed schools reportedly had high mean values, but the mean score was found higher in L-III schools than in L-II schools.

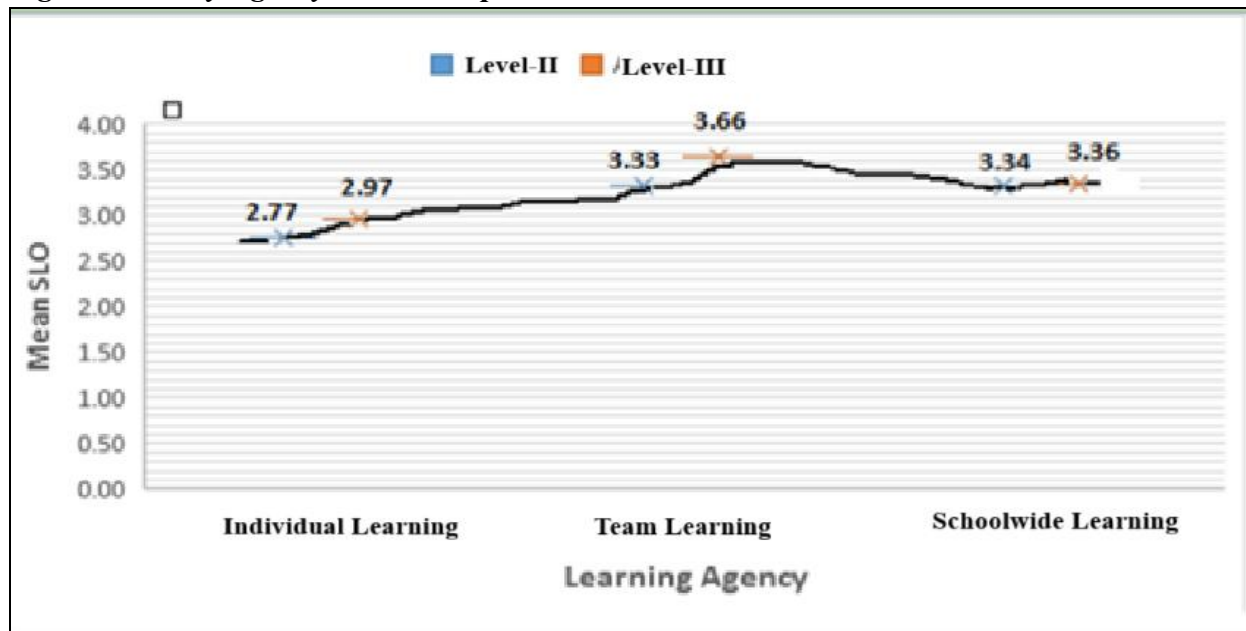
On the other hand, schools had lower mean scores in the characteristics like embedding systems for collecting and exchanging knowledge and learning (ESCEKL), establishing a culture of inquiry, exploration and innovation (ECIEI), and learning with and from the external environment (LwfE) in the same order, with a similar pattern in L-III & L-II schools. The model and grow learning leadership (MGLL) had a moderate mean value ($\bar{x}=3.37$).

Overall, the schools participated in the survey were found to be slightly above average level ($\bar{x}=3.38$). The results also indicate that there was slight mean variation between Level-II ($\bar{x}=3.33$) and Level-III ($\bar{x}=3.43$) schools.

SLO by Learning Agencies

Organizational learning in schools takes place at organization/school, team, and individual levels. These levels are collectively termed as learning agencies in OL literature. Figure-1 below shows the level of OL by these learning agencies as perceived by teachers.

Figure 1: OL by Agency: mean comparison



Source: Field data synthesized by the researcher

The SLOQ has a total of 52 items, 33 for measuring the action dimension, and 19 for measuring the thinking dimension of LO. Using expert judgment, these items were categorized into learning agencies, namely individual (10 items, 6 for measuring action), team (18, 4 measuring thinking), and school level (24 for measuring action). The results showed that a relatively high level of learning takes place at team level, and school-level learning came second. Whereas, the mean level learning at individual level was found to be the lowest in both action and thinking dimensions (see the graph above) compared to the learning that took place at team and school level. Moreover, learning at individual, team, and school level was found lower in L-II schools than in L-III schools. The mean value of learning for action dimension of SLO was also found higher than the thinking dimension in both L-II and L-III schools.

Table 4.6: Mean Learning of post-1994 Instructional Reforms by Personal Teacher Agency

Items	Level II	Level III	Grand Mean
1. I share to others the school's vision of being a learning community and am committed to it	2.65	2.83	2.74
2. I am aware of the teachers with the specific abilities and professional experience to assist me when an opportunity or problem arises on how to do with instruction	2.57	2.95	2.76
3. I am interested to access to the school's databases to obtain knowledge about teaching and learning	2.71	2.87	2.79
4. I often analyze and use multiple sources of data for feedback, including through ICT, to inform my classroom practice	2.61	3.15	2.88
5. I feel comfortable turning to other teachers for consultation and advice regarding classroom practice	2.57	3.21	2.89
6. I often engage in identifying the priorities for my own professional learning	2.77	3.03	2.90

The mean scores for some specific items were also found below average (<3.0); the results presented in Table-4.6 show that teachers seldom disseminate and commit to the school's vision of being a learning school. They also lacked the knowledge about other teachers in their school with specific professional experience from whom to obtain professional assistance. Not only in seeking assistance from experienced teachers, but also in accessing the school's database; individual teachers seem interested to acquire knowledge about classroom practice from neither experienced teachers nor the school's database. This implies learning by personal agency, and especially, information seeking and dissemination was found at its infancy stage. With regard to the action dimension, teachers at individual level rarely take actions to learn new way of exercising their classroom practice as required by the post-1994 instructional reforms, especially in L-II schools. This could be observed from the mean scores (See Table-4.6) which are below average as measured in a five-point Likert scale.

Variability in SLO

Inferential tests were run to check whether or not the practice of OL show a statistical difference with differences in the variables of interest. Consequently, only school level and perceived level of CPD implementation yielded a statistically significant variation in OL practice as shown in Tables 4.7 and 4.8 below.

Table 4.7: Independent samples t-test by School level

Dimension	School Level	N	Mean	SD	df	t	Sig. (2-tailed)
Thinking	L-II	465	3.33	.78	783	-4.789	.000
	L-III	320	3.59	.69			
Action	L-II	465	3.32	.77	783	-4.734	.000
	L-III	320	3.57	.65			
Aggregate	L-II	465	3.32	.75	783	-4.962	.000
	L-III	320	3.58	.64			

The result presented in Table-4.7 showed that the mean differences (at $df=783$, $\alpha=0.05$, two tailed test) yielded in a statistically significant variation between beginner (L-II) and already functioning schools (L-III) implying that L-III schools practiced OL better than L-II schools with respect to learning the post-1994 instructional reforms.

Table 4.8: Analysis of Variance by Perceived Level of CPD Implementation

Dimension	Comparison	SS	df	MS	F	Sig.
Thinking	Between Groups	27.542	4	6.885	12.554	.000
	Within Groups	427.815	780	.548		
	Total	455.357	784			
Action	Between Groups	30.883	4	7.721	15.443	.000
	Within Groups	389.951	780	.500		
	Total	420.834	784			
Grand Mean	Between Groups	28.724	4	7.181	14.912	.000
	Within Groups	375.631	780	.482		
	Total	404.355	784			

Similarly, SLO differs statistically with perceived level of CPD implementation; that is, schools which claimed to implement CPD better, had higher mean SLO than schools which had lower level of CPD implementation. This is because at $df [4, 780]$ and two tailed test, the F-values [12.55 & 15.44] were found statistically significant. The post-Hoc analysis (Tukey HSD) showed that the variability occurred between schools that practiced CPD at low/very low level and those schools that practiced CPD at average or above average levels. The other school and teacher related variables did not yield any significant variability in practicing OL.

Variables related to learning agencies are reported to affect or not affect organizational learning in schools. The regression analysis presented in Table-4.9 showed the predictor variables to SLO.

Table 4.9: Multiple Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.325	.240		5.509	.000
	School level	.236	.051	.163	4.630	.000
	Teachers' career ladder	.026	.040	.038	.650	.516
	Teaching experience	.031	.042	.043	.724	.469
	Qualification	.131	.052	.088	2.501	.013
	Subject taught	.006	.017	.013	.372	.710
	School Cycle	.077	.041	.067	1.875	.061
	Level of CPD implementation	.232	.029	.280	7.980	.000

a. Dependent Variable: SLO

The results showed that school level, CPD implementation, and educational qualification contributed significantly to the variability in SLO. Specifically, the results in the table above showed that for each unit increase in the school level, CPD implementation, and educational qualification, the SLO is expected to increase by 0.236, 0.232, and 0.131 units respectively. This implies that much of the variability in SLO was accounted for the variations in school level and CPD implementation. The t-statistics and the p-values also showed that the variability accounted for these variables were statistically significant. However, the regression analysis revealed school and teacher level variables altogether accounted only for 12.6 percent of the variances in SLO ($R^2=0.126$). Other variables like school cycle, career ladder, teaching experience, and subject/s taught were not predictors of SLO practices .

4.4 Mechanisms of learning post-1994 instructional reforms in case schools

The quantitative survey result presented in section 4.3 reveals Level-III schools were better positioned than Level-II schools with regard to being a learning organization. Consequently, two case schools (one from each Level) were purposively selected to understand how these schools have learned those reforms. The analysis below presents the findings case by case, and then a cross-case analysis is carried out to compare the organizational learning mechanisms (OLMs) applied by the case schools.

4.4.1. Case-by-Case Analysis

Case School-1

This school is located in Debre Birhan Regio-politan city²⁹, North Shawa Zone of the Amhara Regional State. There were a total of 15 public Primary and middle schools in the city, and this school has been consistently performing at the top. The site where the school established was a refugee camp for children and parents affected by the 1985 drought that caused famine in the northern part of Ethiopia. Soon after in 1986, it started to admit these and other children for schooling. The name ‘Biruhtesfa’ refers to this historic incidence just to capitalize on the bright future of the children enrolled in the school.

Since its establishment, the school collected 35 (thirty-five) trophies from the Woreda Education Office (WEO), Zone Education Department (ZED), the Regional Education Bureau (REB), and the Federal Ministry of Education (MoE) for its best accomplishment mostly in teaching and learning affairs. It has also been awarded by international organizations like the USAID for its remarkable performance in Early Grade Reading Assessment (EGRA) at national level in 2010. The school has been headed by the same principal for the last eleven years, and most of these trophies were collected under his leadership. The school also outperforms other schools in the Zone in the school’s standard evaluation, undertaken every three years at national level. It has never been graded in L-I or L-II category. Moreover, the school has been a best performing school in the town in grade eight regional examinations, the percentage of students who passed the grade eight national examinations never come below 90%, which is one of the highest passing rates in the zone (See Appendix-3). The school is also a cluster center, and in the cluster, there are seven schools, two of these are private schools. According to the principal, no school in the cluster except the private schools outperformed this school in grade eight regional examination scores in the last eleven years.

By the time of the field study, the school enrolled Early Childhood Care and Education (ECCE), primary, and middle school children (N=1435), and a total of 56 teachers have been deployed in the school including ECCE teachers employed by the school on contractual basis.

²⁹ Workineh, N.A. (2022). Investigating the most essential skills of planners in Ethiopia’s Amhara National Regional State’s Regio-politan cities. *Journal of Innovation and Entrepreneurship* 11(67). <https://doi.org/10.1186/s13731-022-00265-w>

Organization Learning Mechanisms (OLMs) employed by the school

Implementing the post-1994 instructional reforms namely Active Learning (AL), Continuous Assessment (CA), Action Research (AR), and Reflective Practice (RP) has become a statutory practice endorsed by the ministry of education since the 1994 education and training policy, and especially following the endorsement of the Teacher Education System Overhaul (TESO) in 2003.

The analysis in C-1 shows there are different mechanisms through which teacher team-ups and the school have been learning these reforms. A mathematics teacher who served for more than two decades was still using her modules collected during initial training she succinctly summarized how teachers in the school have been learning those instructional reforms:

I acquired [knowledge about] these concepts through peer support, on-job trainings, and making connections with the Teachers' education college around. For instance, we conduct action research that is recognized at zonal level. We also support each other through CPD. Moreover, I first acquired knowledge about them during my training in the teachers' college. Still, I used the modules and exercise books as a reference in my teaching career.

a) School-based Continuous Professional Development (CPD)

CPD is the common platform through which teachers in the school learn post-1994 instructional reforms. In this regard, the case school (C-1) has endorsed a very structured CPD. First, the school has a long tradition of practicing a structured CPD; since 2012, it has been headed by the same principal. And, in those years to date, the CPD continued uninterrupted as a tradition. The school principal stated that the vice principal who headed the school before his appointment was a role model for his commitment to CPD, from whom he scaled-up the tradition in the school. One of the teachers who headed a CPD team in the last four years supported the principal's view in the following way:

Continuous professional development has been implemented in the school uninterruptedly, the school undertakes professional development activities for two hours every week. I am one of the team leaders. I have been leading a CPD team for the last four years.

Second, the practice is supported by continuous follow up from the principal; accordingly, every year begins with an orientation training from the school principal on prioritized CPD agendas of the academic year; the teams are headed by experienced and best

performing teachers, and teachers submit portfolios and receive feedback for improvement. According to Meseret and Fekadu “CPD team leaders and the school principal provide feedback on the portfolios developed by teachers. Providing written feedback to CPD portfolios seem unique to this school. Observation on selected teachers’ portfolios complement what the teachers and the school principal said regarding written feedback given to teachers’ CPD portfolios (See Appendix-4). The supervisor also provides similar trainings particularly when new directives come from the top education hierarchies (like the WEO, ZED or REB)/, according to Genet.

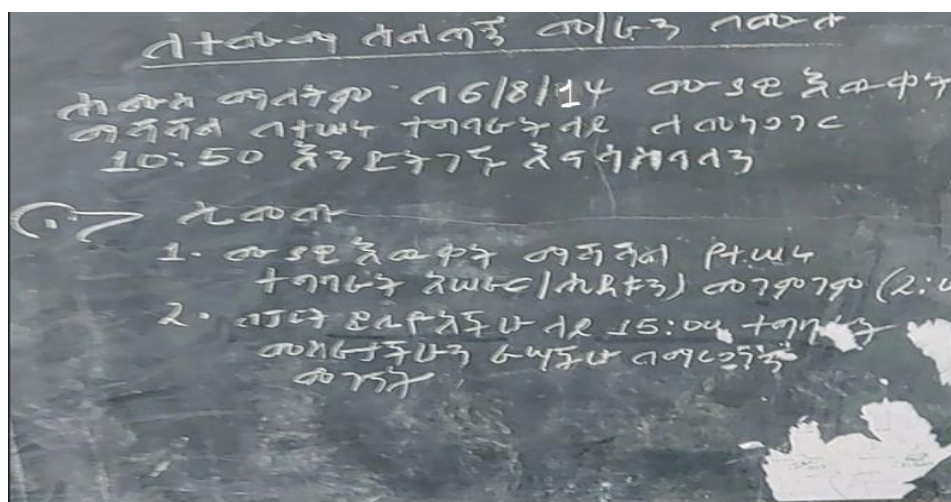


Photo taken by the Researcher from the school’s CPD Room (Nov. 18, 2023, 4:10 PM)

Third; according to the team leader, teachers’ participation in the CPD is active in which “every member has a role to play. As a result, topics are apportioned among the team members and everyone has to make adequate preparation by referring to books and asking professionals working in higher learning institutions around, and share their experiences on the topics.”

b) Occasional on-job trainings

On-job trainings organized by NGOs and the Woreda Education Office (WEO), and occasional professional support provided by the nearby higher learning institutions (teacher training college and university) are common strategies through which the school and teacher teams learn instructional reforms. According to the school principal, every year there are opportunities for on-job trainings from the nearby teacher training college and education faculty of a university around, and “almost all the teachers in the school should participate at least once in a year in those trainings.” The school enforces every teacher who participates in

those trainings to share experiences to other teachers not participated in the trainings and to document the knowledge obtained from the training.

Table 4.10: Teacher training needs in Case-1

Year	Request	Teachers' training needs	Rank
2022/23 N=46	ZED	➤ Action research	1 st
	>>	➤ Teaching methods	2 nd
	>>	➤ Basic computer skill	3 rd
	>>	➤ Utilization of teaching aids	4 th
	>>	➤ Continuous assessment	5 th
	>>	➤ Lab utilization	6 th
2023/24 N=52	CTE	➤ Lesson planning	1 st
	>>	➤ Teaching methods	2 nd
	>>	➤ Continuous assessment	3 rd
	>>	➤ Utilization of teaching aids	4 th
	>>	➤ Textbook evaluation	5 th
	>>	➤ Action research	6 th

Source: - Synthesized from a request Letter addressed to ZED and CTE

The ZED often sends official letters to schools asking training needs of schools for updating; a sample of training demand filled in by 46 teachers in the schools shows that action research was found to be the first priority of teachers to receive training on followed by teaching methods, both of which are building blocks of post-1994 instructional reforms. The school regularly responds to these request letters, according to the school principal. Basic computer training, utilization of teaching aids, and continuous assessment were also among the teachers' priority needs that ranked third, fourth, and fifth respectively. This shows that on-job training is among the OLMs that the school and teacher teams learn the post-1994 instructional reforms. Similarly, the college of teachers' education around send training needs to the school; a sample response from 52 teachers obtained from the school shows that lesson planning, teaching methods, and continuous assessment were the top priorities on which teachers in the school were interested to take trainings on

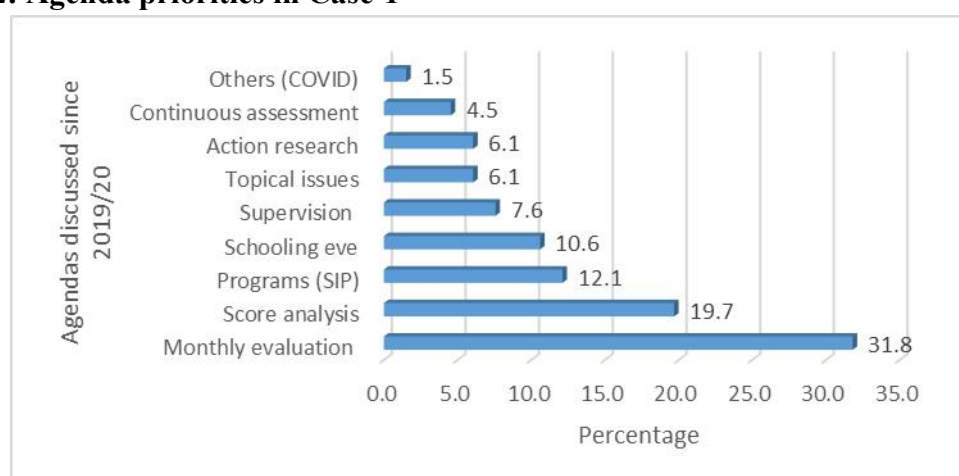
The school also provides on-job training at the beginning of every year, and these trainings aim to refresh teachers with teaching methods, assessment techniques, classroom management, and CPD. The supervisor also organizes trainings nearly per semester, as stated by the school principal. These trainings according to the school principal are “ provided at school level or including the cluster schools” At the school level, for instance, teachers have regular and periodic discussions with the school leaders, and especially with the school principal. Periodically, the school principal organizes training per semester on active learning,

continuous assessment, professional dialogue, classroom management, and similar other contents of the post-1994 instructional reforms. Review of documents from the principal's office confirmed that such trainings were given complemented by training modules prepared by the school principal (see Appendix-?). The regular discussions focus on the practice of continuous professional development, peer supervision, and curriculum review.

The occasional trainings organized by NGOs, higher learning institutions functioning around the school, and the WEO and/or the ZED though selective are school-wide in their nature. This is due to the fact that teachers who participate in the trainings are required to share the lessons learned to the school community. However, the school principal commented that certificates obtained from participation in such trainings didn't count on teachers' career development.

The document review, however, show the school rarely discussed post-1994 instructional reforms independently partly because these reforms are discussed in relation to school performance evaluation as shown in the Figure-2 below.

Figure-2: Agenda priorities in Case-1



Source: School minutes from principal's office (2019/20 to 2023/24)

Overall, the post-1994 instructional reforms are commonplaces for on-job trainings and periodic or regular professional development programs of the school. Trainings by the CTEs around often focus on 'short trainings on CPD, Active Learning, Continuous Assessment, and Action Research'

c) Special Forums

Other than the CPD team ups, there are forums established for a special purpose such as grade-one and grade eight forums. The main purpose of these forums is to design strategies so that children can accomplish academic goals set by the school and the WEO. According to a Aesthetics teacher, the 8th-grade teachers' forum discusses on how the teaching-learning process is going on and how students are learning (the performance evaluation in figure- is related to this). It also suggests improvements required to enhance the students' learning. Score analysis is the source of the feedback that informs teachers on the limitations and strengths of the instructional process.

Consequently, low score obtained by students of the above-mentioned grade levels meant the teaching learning process has limitations that need intervention. In addition, these forums have critical roles to provide feedback particularly to the OL undertaken at team and school level, because according to a Aesthetics teacher, these forums follow up the quality of the teaching learning process. Very recently (by the time of the data collection season), a forum for grade six is also in progress to launch. Thus, though the very purpose of establishing the forums is to enable students perform better in regional examinations (in the case of grade eight and grade six) and master the literacy and numeracy competencies set by the WEO (in the case of grade-1), they are part of the OLMs practiced in the school to internalize the instructional reforms.

The paradox is the post-1994 instructional reforms including recent directives like the education transformation program (MoE, 2023) and ESDP-VI (MoE, 2021) focus on creating children who are problem solvers, critical thinkers, and innovative and creative thinkers, but the school employed these reforms to help students perform better in paper-pencil tests and mastery tests in literacy and numeracy assessments (Grade one). One of the excuses for teachers not to fully apply the learning from CPD, on-job trainings, peer/expert supervision, experience sharing, and many other learning platforms is attributed to the felt contradiction between the assumptions underlying the post-1994 instructional reforms and the assessment practices endorsed by the MOE and REB.

d) Peer and expert supervision

There is supervision tradition undertaken by peers, stream heads, and school leaders (supervisor). A science teacher in the school observed that teachers in the school ‘share

experiences through peer supervision’’, and this has helped them to improve their teaching and evaluation methods. One of the focus areas, probably the major for this supervision is implementation of the post-1994 instructional reforms. Scanning on the school checklist (see [Appendix-5](#)) shows that implementation of the post-1994 instructional reforms like continuous assessment and active learning are focus areas of the peer and expert supervision.

The supervision is often conducted within teachers who teach similar or related subjects; consequently, teachers in the language stream supervise each other so do teachers in mathematics, sciences or Aesthetics streams and provide feedback on each other’s teaching practice. According to the school principal, undertaking peer supervision at least once in a semester is a must to do, and failure to do it counts down in their performance appraisal (every month there is tradition of selecting shining teachers in each dep’t; consequently, the highest percentage of the agenda focused on performance evaluation as shown in graph). The instructional practice in general and specifically, the implementation of post-1994 instructional reforms like active learning and formative continuous assessment are among the priorities where the peer supervision focuses on.

Agentic learning

The organizational learning practiced in the school either in the form of CPD, on-job trainings, post-supervision feedback and/or forums represents team and school-wide learning from OL point of view. Learning at individual agency, though not by all the teachers, was also practiced in the case school. A mathematics teacher for instance said “I have a successful experience in upscaling the methods and knowledge I developed individually to other fellow math teachers. This is done through organizing discussions. We even, share our knowledge with the zone.” Learning by the three agencies interconnected in some way as stated by Aesthetics teacher, he said,

We have a culture of knowledge exchange at the department level. We have a regular monthly meeting, which we use to share knowledge and experiences. The department also reports what we have done to the school. On its part, the school recognizes the achievements of departments, clubs, and committees.

Nevertheless, teachers didn’t follow any web-based learning platforms such as social media page to update themselves professionally implying the limitedness of learning at personal agency. The source of knowledge for some teachers was the knowledge they acquired from college/university or even before. Aesthetics teacher said, “I have acquired

them throughout my education starting from my childhood. I am highly influenced by the activities of my teachers. Another teacher said she has a TV program she watches on how to teach children (Turumbe). However, learning at personal agency, according to a science teacher in the school, was limited; she said, “ I admitted that we are not trying to update ourselves moving beyond CPD. We have gaps in exploiting technologies. We have done little to upgrade ourselves, except for what we have gotten from our college experiences.”

Teachers in the school undertake action research and curriculum (textbook) evaluation though limited in number. The action researches conducted so far were a kind of experience sharing on how teachers used to solve problems related to teaching and learning. The curriculum/textbook evaluation was conducted to suggest limitations of the textbooks despite the suggestions from teachers were rarely taken as inputs for revising the textbooks. The principal formally endorsed reward schemes for teachers who undertake action research and curriculum evaluation.

The school also motivate teachers to conduct ACR “ the school encourages and incentivizes teachers who do research and try to come up with innovative solutions, according to a language teacher “every year more than 10, 000 ETB is allotted to reward teachers who conduct ACR as stated by the school principal.”

The school has a separate class named teacher Mulunesh memorial center named after an exemplary teacher (now retired) to her professional commitment. The teacher had been recognized at federal, regional, district, and school level for her extraordinary achievement in her profession. The school stores holdings like reference materials collected by her, exemplary portfolios developed by teachers, training materials developed by the school principal, and manuals sent from the top education hierarchy, NGOs, and others to guide instructional practices.

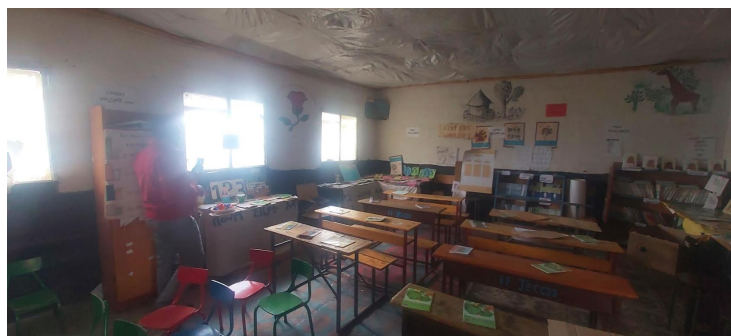


Photo by Researcher: Teacher Mulunesh Memorial Centre (Nov. 22, 2023, 3:18 PM)

Case-2

The school was established in 1954 in the middle of the town; The school principal has worked in the school for nine years since 2015; he holds a Master's Degree in early childhood care and education (and Bachelor Degree in EDPM), and has 15 years work experiences in school leadership position. The school accommodated a total of 43 teachers (F=25) and 462 students (F=278).

This school seems disadvantaged in many regards; there isn't enough room for students to play freely. Situated next to a busy main road and surrounded by a religious institution right next to its fence line, the situation is anything than ideal. The school buildings, with the exception of one brick building, are made of mud, indicating a lack of resources. This is further demonstrated by the fact that there are no sufficient rooms for teachers to prepare themselves and to stay in. Even the entryway, an improvised gate made of discarded corrugated sheets that are shakily fastened to wood, highlights the poor infrastructure and difficult circumstances that learning occurs in.

The OLMs that are employed by this school to learn instructional reforms, though shallow, include occasional on-job trainings, the CPD, peer/expert supervision, and experience sharing with cluster schools. Since the mechanisms have been endorsed from the top, the typology in the school system is almost the same; the only difference is in the quality of practice.

To start with on-job trainings, the school occasionally organizes trainings to the school community. According to a language teacher, it organizes school-based trainings on different topics occasionally. In her own words,

The school organizes its own trainings. The training contents include continuous assessment, participatory teaching and learning methods, action research, and classroom management. In those trainings, we exchange experiences from one another.

There are also training opportunities offered by organizations working in the town. A case in point is ACD (a local private firm in a nearby area) which promised to provide an ICT training opportunity though this offer was not accepted by most teachers except a biology teacher who completed the training by personal interest.

According to the school principal, the teachers were not willing to participate in the on-job trainings for different reasons. Of course, there is no a working principle in the school that compels teachers to participate in such trainings; as a result, participation is based on willingness. The lack of willingness to participate, according to the principal, is a claim for financial rewards (per diem) during the on-job trainings.

Regarding CPD, engagement in continuous professional development program is mandatory for schools functioning in the town, as elsewhere in schools all over Ethiopia, it is also a requirement for every teacher. Consequently, the schools should at least endorse the program and show documented evidences that prove the school and teachers' engagement in the program at least for two hours in a week or 60 hours a year. Accordingly, the school though symbolic endorses CPD. According to a language teacher, for example, teachers in the school have been participating in CPD to share experiences on contents send from the WEO like AL, CA, AR, and CRM within CPD teams.

Similar to other schools in the Zone, the CPD modality has changed from unitary to subject matter-based model since 2022/23. Consequently, teachers who teach the same or similar subject team up to make professional dialogue on the content and delivery of the subject matter. A mathematics teacher said the following on how the new CPD is going on:

Sometimes, I face topics that are difficult for me to teach. I often take lessons on how should I teach such topics from my friends. I learn from their experiences regarding what kind of method they apply and what effective teaching methods they make use of to help students understand the lesson. When I teach, my teaching method might not fully involve students; So, by taking lessons from my friends, I was able to teach my students in the way they have taught students for ease of creating student learning.

Similarly, a biology teacher stated that they study contents like AL and CA collaboratively within the subject matter they teach, and the new CPD is organized in a way that enables them share experiences with each other but not in a kind of mentor-mentee approach. To state in his own words,

I often share experiences from my colleagues who teach same or similar subjects on how they teach students. I observe how my colleagues teach contents which challenges me, apply [teaching and assessment] methods which I found difficult to apply. And I try to practice it in my class what I have shared with them.

The professional dialogue in some cases includes joint planning of lessons; on how the CPD team in her circle conducted the professional dialogue, an aesthetics teacher said.

We share experiences on our classroom practice, and we start the experience sharing with the lesson plan. We discuss on the plan, identify the areas that need improvement, and implement it in the classroom. During implementation, we observe each other how the plan is implemented. My colleague and me teach aesthetics, and she teach the practical part in the field and I teach the theoretical part. As a result, we observe each other both in field and in the classroom. During observation, we focus aspects of the classroom practice that need improvement (I mean limitations)

The erstwhile CPD often focused on three top priorities; and in most cases, these priorities were sent to schools from the top education hierarchy in which the post-1994 instructional reforms were commonplaces of these priorities. Unlike the previous CPD that focused on general pedagogies, the new CPD focuses on developing professionally in subject-specific professional competencies (PCK)

Participants confirmed that the new approach is better than the previous approach for OL in the schools; but, it lacks some basic requirements. For instance, there is no any guiding framework (handbook) on how to go about the professional dialogue, and this makes the practice a mere lesson study than a professional dialogue.

The other strategy of learning is peer/expert supervision which is usually carried out twice in a semester, though it was said nominal. The supervision is undertaken based on a checklist cascaded from the woreda education office that necessitates every school in the town to undertake peer and leadership-led supervision (Appendix-5). Accordingly, it is said mandatory to any school to show documented evidence that shows supervision practice in the school. Teachers in the school engage in peer supervision within departments (**not between departments**). The supervision focuses on the what and how of teaching and learning. A mathematics teacher replied:

I teach mathematics and I make supervision with another teacher in the department. I teach grades one and four, and I have a peer who teach mathematics in grades two and three. We supervise each other and while supervising each other, we focus on how to teach challenging contents with appropriate methods. For instance, I observe here classes and learn how she teaches contents which are challenging to me and so does she. After class, we sit together and make post-supervision discussion, and the discussion focuses on sharing experiences from the reflections we make on the how of the lesson. By the way, last year, I taught the sections she is teaching this year and she taught the sections I am teaching this year. Hence, the post-supervision discussion

also focusses on retrieving memory on how we used to teach a specific content last year. The experience sharing in this session too focuses on the how part. However, I can't say that the supervision practice is a shared tradition that is implemented by all the teachers.

Experience sharing with cluster schools

Experience sharing with cluster schools is another strategy applied in the school to learn those reforms. Following the endorsement of ESDP-II, schools functioning all over the country have been organized in clusters, and the very purpose of organizing schools in clusters was for better coordination and sharing of resources (MoE, 2024)³⁰. In the cluster, there are five schools, and C2 shares experiences with other schools; which often includes visits. There are also occasional trainings organized at cluster level; and these trainings focus on continuous assessment particularly on developing paper and pencil tests.

Trainings are organized at cluster level; for example, we take trainings on continuous assessment particularly on constructing paper and pencil tests. These trainings support us to shape our professional practice but they are limited (biology teacher).

The capacity building trainings organized on instructional reforms at cluster level were often given by providers outside of the school like ZED, WEO, NGOs, and teachers training colleges due to the fact that bringing teachers from the schools to the cluster center is simpler than other alternatives. As a result, self-initiated learning between schools is almost insignificant, and relationship mainly focuses on recreational activities such as sports and student question and answer events. In view of this, a language teacher said, "we gather in the cluster school to undertake sport activities and student questions and answer competitions."

A mathematics teacher also said, "I feel there is somethings we obtained from such gatherings; but more importantly we see our standings relative to other schools in the cluster; last semester for instance we ranked to the bottom in students' question and answer competitions."

Overall, the school employed the OL strategies observed in C1 to learn post-1994 instructional reforms, but the quality and rigor of applying these mechanisms seems superficial; consequently, the common source of instructional knowledge for most participants was found the initial training they took in colleges and universities.

³⁰ MOE (2023). Education Statistics Annual Abstract 2022/23. <https://MoE.gov.et/>

I learnt these concepts [the instructional reforms] when I was in the teacher training college I have graduated, and as a teacher I am using that knowledge [Aesthetics teacher]

I worked in different schools and I got lessons from those schools while working with many teachers. But the most I have learned about continuous assessment, active learning, action research and other related concepts is from the college I have been graduated [Mathematics teacher]

I have acquired the knowledge and skills about active learning, continuous assessment, and action research more from a college/university I graduated [Language teacher].

Contrary to this, a biology teacher, one of the learning teachers, believes that he acquired it via both mechanisms implying that there is grafted knowledge (knowledge taken from other schools) which participant teachers learned from the schools they have worked, he said,

I acquired knowledge about instructional reforms in both ways; I started my career as a certificate teacher, and through time I have been upgraded to Diploma and recently to Degree level. In the course of these trainings, I learnt about contents like continuous assessment, active learning, action research, reflective practice, and related topics in pedagogy and subject matter teaching courses. And I feel that I have obtained something during those trainings. Since my deployment as a certificate teacher, I have been sharing experiences with different teachers, and this has helped me to acquire knowledge on how I should teach effectively, assess students, and how I should prepare tests. When I started my career as a Biology teacher at diploma level, I used to share experiences with other Biology teachers on how I should teach a given topic, especially a challenging one. Now, I received my degree in Biology, and I am sharing experiences with other teachers on how I engage my students actively; assess them properly; and manage classes during the teaching learning process. I think I have integrated the knowledge from these two sources.

Actually, post-1994 instructional reforms are included in the teacher education curriculum since TESO (2003). They are included in the initial and in-service training programs as independent courses in general pedagogy and in courses designed to equip teachers in pedagogical content knowledge (PCK). Consequently, some teachers felt that they have learned these contents in colleges and universities during initial training.

A learning teacher in a stagnant school

Teacher Yitatur (pseudonym) is a biology teacher in the school, he has worked for 23 years of which five years have been in the case school. He started his career as a certificate teacher and through continuous in-service training opportunity offered by the government, he upgraded to Diploma and recently to Degree level. In the schools he had previously worked for, he used to be a school principal besides his teachership position, and according to him, it was his commitment that raised him to the position of principal-ship by delegation. Unfortunately, due to health problem, he quit the position and transferred to the school he is working for now.



Photo taken in the school by the researcher (Nov.24, 2023, 1:27 PM)

This teacher is a passionate teacher who is trying to learn every day, for example, he was one of a few teachers in the school who conducted action research to solve the learning difficulties of students in the subject he is teaching. He has conducted three action researches since his deployment in the school though no reward was attached to his effort. The teacher often tries to equip himself with current knowledge and skills that are relevant to his profession as a teacher. For instance, he is the only teacher in the school to complete an ICT training opportunity offered by a local firm. Supported by the training taken, he is able to use laptop and LCD to teach his students. He also writes exam questions by himself using a personal laptop whereas, others were not willing to start the training for different personal reasons.

The teacher is considered among the school community as a hub of all the knowledge and skills whom other science teachers in the school refer to when they face difficulties regarding the content and methods of teaching and assessment. As a result, teachers who face difficulties of contents and methods of teaching share experiences from this teacher. A science teacher described his willingness and devotion to share his experiences in the following way: “If we are interested, he is willing to share with us his knowledge and experience all the time; this is what he usually does for teachers and students.”

Unfortunately, there is no formal way of exploiting the knowledge from him; instead, the school uses this teacher not to coach other teachers but to execute routines in different committees since he delivers assignments on time.

Moreover, he documented in his office reference materials he personally collected, and these materials are related to the subjects he teaches and the methods of teaching and assessment as well. He also documented evidences that testify personal learning progresses including CPD plans, portfolios, action research reports, and peer supervision feedbacks provided from colleagues. He also produced teaching materials to support students learning, he stated ‘‘I used to prepare reference materials when I was in another school now I don’t have reference materials I personally prepared; but I have books that I purchased and I often refer to them when I face difficulties in my teaching career.’’

4.5 Conditions fostering/inhibiting OL in the schools

In this sub-section, I tried to understand those conditions first case by case and then via cross case analysis, and finally the findings are discussed following integrative approach so as to show the practical and theoretical implications of the results.

4.5.1 Case by Case Analysis

Conditions fostering OL in the school [Case-1]

The interviews conducted with participants in Case-1 disclose various factors that foster OL in the school, but most of these factors are associated with the leadership tradition of the school. In view of this, a mathematics teacher appreciated the freedom given by the school principal in comparison to principals in other schools within the cluster. He said “in other schools within the cluster, I see that the interests of the principals dominate the school. Consequently, the teachers do not have the freedom even to ask their rights.”

This shows that professional freedom provided by the school principal is one of the conditions that foster OL in the school. Concurrently; however, teachers are expected to deliver what they are expected to perform. Regarding this, a language teacher said ‘we are obliged to cover all the contents included in the textbooks. That is one of the priorities in the school leaders’ supervision, failure to do so is considered as violations’

According to the school principal, teachers have freedom to select methods of teaching and assessment techniques (formative one) as far as they have discussed during the professional dialogue sessions. Nevertheless, they don’t have the freedom to make adjustment on the contents of the subject matter they are teaching and on the summative assessment techniques prescribed from the top education hierarchies.

Second, the school leadership is teacher-friendly and relationship is based on mutual trust. A mathematics teacher appreciates the ‘teacher-friendly leadership applied by the school principal.’ According to a science teacher, this motivates teachers to contribute as much as they can. The same teacher also added, “The principal has established recognition and incentive mechanism for better performing teachers instead of taking coercive action on underperforming teachers. This is supported by the school principal, he said, “I have never faced a teacher to rule over him/her coercively.” Moreover, participant teachers said flawed reports are considered unethical in the school, which again substantiating the professional freedom observed by participants.

The findings show the leadership is one major factor to foster organizational learning in the case school. In particular, this teacher-friendly leadership helped teachers to learn instructional reforms during supervision, CPD sessions, and on-job trainings.

The principal is very successful in many regards, he has repeatedly got awards at Woreda (6x), Zonal (6x) and regional (3x) levels for improving students’ learning performance. The school has also received recognition at Federal level, and in 2015/16, it was a centre for experience sharing. Various institutions from all over the country including Addis Ababa Education Bureau visited the school. I asked the source of his commitment, and the principal replied:

Given all the circumstances, I can’t sit and take monthly salary. I have to serve the people who supported my education. I have to devote and support my community. It is interesting that I have brought a visible change in the school. The people are positive and involved greatly in advancing my plans. I have also tried to find other

sources of income. I set up four container shops in the city which serve us to generate additional sources of income. The school earns a minimum of 150,000 birr yearly from the shops. Generating income is one of the main responsibilities of a principal.

Conducive working environment, which is created by the leadership, fosters workplace learning. In this regard, the school makes the work environment conducive. Access to free Wi-Fi, separate room for CPD, and the knowledge management center (teacher Mulunesh memorial Centre) could be indicators that witness the availability of conducive working environment that foster organizational learning.

To start with free Wi-Fi, the school installed free Wi-Fi (4 GB) to the school community especially for the teachers. This, the principal said, has benefited teachers in the school to google information related to the subject matter they are teaching and to the mode of delivery and assessment. They also use to conduct action research, evaluate textbooks, and search for teaching aids. According to a science teacher, the free Wi-Fi helped her to get information that could help improve her teaching. She also confirms that science teachers are active in exploiting this opportunity (science teacher). A language teacher also observed that access to free Wi-Fi is one of the evidence for creating teacher-friendly leadership.

Second, the school arranges a separate room for practicing CPD, which can accommodate 15 to 20 teachers at once. The room among others is dominantly devoted for professional dialogue during CPD sessions. Memos from CPD leaders are also communicated, teachers also occasionally use the room to produce teaching aids. There is also a memorial center (named after teacher Mulunesh, now a retired teacher), and the center currently documents the materials (reference books, portfolios, research reports) she collected and other useful materials that are assisting teachers' workplace learning.

Third, the district's finance department often allots small amount of budget to the school. The school diversifies its income to alleviate this budget constraint. The school principal describes the severity of the financial problem and the solution he designed in the following way:

The district's finance department allotted Birr 16, 000 for the 2023/24 fiscal year. It was even less in the previous years. On the other hand, the school enrolls more than 1400 students in the academic year. The school hired workers on contractual basis. For instance, in the early childcare and education classes, we have hired six care giving nurses. We have also employed three guards and one IT technician responsible to oversee the computer labs. There are also janitors. The school pays about 25000

(twenty-five thousand) per month for salary alone. The budget allotted from the government cannot pay even the salary of these contract workers. The paper of the mid-exam costs more than Birr 16,000 (Sixteen thousand Birr). Thus, I have tried to find other sources of income. I set up four container shops in the city, and the school earns a minimum of birr 150,000 (one hundred fifty thousand birr) yearly from the shops. I also work hard to mobilize the community around from which we earn about birr 400, 000 (four hundred thousand birr) per annum.

Therefore, the school generates more than 550,000 (five hundred fifty thousand birr) per annum from own business and stakeholder participation, which is more than 34 folds of the budget allotted by the local government in 2023/24 fiscal year. Since building the school community's professional capacity requires budget, diversifying the income sources is a critical element that fosters OL in the school. For instance, the school has been able to allot budget to motivate school-based leaning. The case in point is the amount (about ten thousand birr) allotted per annum to reward teachers who try to improve own professional practice through action research. This financial reward is awarded on competitive basis. Moreover, the school motivates teachers by organizing business tea during school-based on-job trainings and regular CPD sessions. This, according to participants, has increased socialization among the school community.

Factors inhibiting OL in the school

a) Overdose of prescriptions

The WEO has different formats and contents that it sends to the school. Monthly performance evaluation checklist and peer-supervision checklist are among the formats prescribed every year. With regard to contents for training, though it conducts needs assessment survey, the office sends list of contents on which the school should organize training. These trainings are provided by experts from WEO, ZED, NGOs, or the school leaders. The prescriptions are not innovations of the WEO, according to the school principal; the WEO itself receives the formats from the ZED and the ZED from the REB.

One of the topics that are affected by this syndrome is the CPD contents. Every year, especially before 2022/23 fiscal year, the WEO sends topics for CPD in which the school community should focus on while working on CPD. The letters sent at different times ([Appendix-6](#)) confirm that the post-1994 instructional reforms like CA and AL were among the agendas prescribed from the top education hierarchies. These topics are the commonplaces of the trainings organized at cluster level, too. The teachers complain that

every teacher who participates in the CPD should take these topics irrespective of the subject matter he/she is teaching. Since 2023/24, the modality of CPD has changed into a professional dialogue in which teachers teaching similar or related subjects discuss the contents and delivery methods. This is a kind of ‘lesson study’ where team of teachers who teach similar or related subjects study the content and the method as well. However, this was not the innovation of the school; instead, it is another prescription from the REB which was sent to the WEO via the ZED. Not only the government but also others like NGOs and higher learning institutions provide capacity building trainings to the school following supply-driven model, which is also prescriptive. A science teacher observed the following in this regard:

Every year, the school principal and/or supervisor request us to fill-in our training needs. The request letters often come from either the Zone education department, or woreda education bureau, or NGOs or teachers’ training college/University around. However, most often the training focuses on common contents like continuous assessment, active learning, classroom management, and to some degree action research and science kit.

The repetitive nature of the training and learning contents likely makes school-based learning boring and hinder organizational learning within the school. This is due to the fact that OL in school context requires freedom for innovation, creativity, and uniqueness.

The action research and curriculum evaluation practices of the school are also affected by this prescriptive tradition. Teachers in the school conduct action research and curriculum (textbook) evaluation. Nevertheless, lessons learnt from action research engagements seldom influence further instructional practice since classroom practices in the school are directed more by the prescriptions from the top hierarchies of education. The feedbacks from school-level curriculum (textbook) evaluation are compiled and sent to the WEO ([Appendix-7](#)), but rarely influence curriculum/textbook revision as observed by teachers in the school.

b) Contradiction between reform elements

The post-1994 instructional reforms have been endorsed mainly to create children who are critical thinkers, problem solvers, creative, and collaborative (TGE, 1994). Implementing effectively these reforms does mean changing the old way of doing teaching and learning from transmission model to co-construction where children take active role in the instructional process. However, in reality the reform elements, especially the assessment practice in the school doesn’t conform to the other reform elements. The observations presented below by two participants could prove the felt contradiction:

We are required to make children actively engage in the teaching learning process and participate in self and/or peer assessment. That was really good. At the same time, we are required to cover the portion on time, but it needs more time to cover the content as per the plan [Mathematics teacher].

Content coverage is among the major success parameters that school leaders and experts from the WEO and ZED give priority during supervision sessions. Failure to comply with this is considered as limitation that must be corrected [Science teacher].

With regard to continuous assessment, through application of formative and summative continuous assessment, teachers are required to develop the holistic child who is changed in knowledge, skills and attitude. In practice; however, this aspiration is contradicted by the prevailing examination tradition practiced even in the regional examination administered by the end of middle school (grade 8). According to a Language teacher in the school, “the fate of children to pass or fail to grade nine is determined by multiple choice questions administered by the regional education bureau.” Not only the students, but also the teachers’ as well as the school’s success is evaluated against the passing rate of grade eight students as noted by the school principal.

To conclude, case school-1 is placed in a better position from OL point of view. It tries to exploit internal learning opportunities and explore the sources outside to grow into a learning school. The leadership is placed on top of the factors fostering learning. Post-1994 instructional reforms have been the focus of this learning. The remarkable achievements registered in the school such as in regional examination, performance appraisals, and national learning assessments substantiate the claim that the school is trying hard to grow into a learning community that can realize a learning school, though this effort is challenged by various factors.

Inhibitors of OL in the school Case-2

Organizational learning particularly in school context is facilitated or hindered by myriads of factors. In case school-2; however, the facilitating factors were obscure or non-existent. Instead, various constraints hindered the learning of post-1994 instructional reforms. Some of the factors are unique to this school; whereas, others are shared with the other case school. Poor leadership, failure to balance priorities, overdose of top-down prescriptions, old traditions, inconsistency in communicating the reforms, and other factors likely related to organizational learning disability (OLD) were major inhibitors of OL in the case school.

i) Poor leadership tradition

The school principal worked for nine years in the school. In addition to being a school principal, he has a private business to manage. In the last three consecutive school standard evaluations (conducted every three years), it was ranked in level-II due to poor performance. The following incidences could showcase the limitation of the school principal in creating a learning organization.

First, the participants, though not outrageously, claimed that the leadership is not participatory. To start with, sharing vision has a critical role in building a LO. As a result, school principals are expected to share the school's vision to the school community. The dialogue below epitomizes the leadership atmosphere in this regard.

Q. Where does the vision come from?

A. I think it is developed by the school (Biology teacher)

Q. 'When was the vision formulated, and what was your participation during formulating the vision?

A. In the past, I used to participate. But now... laugh! I speak from my experience in the years I stayed in this school (Biology teacher). In my stay in the school, our role in formulating the vision is almost none. I should speak the truth. If it doesn't exist, I should say it does not at all. I served in the school for five years, but I don't remember the time I participated in formulating the vision and mission. I do not even remember the time I have been communicated about the mission and vision. But I know that my responsibility is to work towards creating capable citizens (Biology teacher)

A. Umm, from my experience in the school, I did not participate in formulating the vision or shaping it in discussions (Aesthetics teacher).

The school principal is also asked about the source of the school's vision and mission, and replied "I crafted the mission and vision of the school based on the visions and missions of the ministry of education, the education bureau, and the zone education department."

The quotes presented above can epitomize the leadership practice and this indicates that teachers in the school have neither participated in developing the vision/mission nor communicated the vision and mission of the school. The school vision, mission, and values were posted nowhere in the school compound. As a result, each participant teacher had his/her own generic version of the vision. Biology teacher, Aesthetic teacher, and

mathematics teacher respectively described the vision as “It is all about quality education”, “it focuses on improving student performance” and “it is about producing capable citizens.”

Schools should develop strategic plan (incorporating the school’s vision and mission) every three years since the endorsement of the School Improvement Program (SIP) in 2008. According to the SIP (MoE, 2008), school leaders are expected to engage stakeholders including teachers while developing the school’s strategic plan. It should also be properly communicated to the stakeholders specified in the SIP blue print. According to the participant teachers, however, the principal neither engages the school community and other stakeholders in developing the school’s strategic plan nor communicates the contents of the plan so as to enable them buy-in the endorsements. A biology teacher was asked about his level of participation in developing the school’s strategic plan. The teacher said, “ my participation is in effectively implementing the plan.” Not only teachers but also the participation of other stakeholders including students and parents is limited to providing data to the strategic plan via survey questionnaires or interviews.

Second, participant teachers confirmed that they had conducted action research when they were in other schools. The Biology teacher, one of the learning teachers in the school said, “Before three and four years, there was an attempt of doing action research,. Recently, however, it is not common to see teachers who conduct action research. Other participant teachers used to conduct action research, but once they joined to this school, four out of five interviewees quit doing action research. For instance, Language and Mathematics teachers who participated in the interview confirmed that they have stopped doing action research since they started working in this school. I probed ‘*Why did you stop to conduct ACR in this school?*’ They replied as follow:

Language teacher- While we were in other schools, we provided what we were expected to do, but here.... (laugh)not that much forced to do, and others supported her reply.

Third, the school has basic facilities like electricity, generator, laptops; and internet source. However, the teachers are not using any technology to deliver their lesson. A biology teacher stated they do not make use of the computers to store personal and team learning accomplishments since they are not required to do so. This shows the leadership’s reluctance in using the resources for supporting workplace learning. Moreover, the school was established before seven decades, but it has not still secured certificate of ownership from the

town's municipality. No water, no lab chemicals, no fire extinguisher, no separate room for professional dialogue, all epitomize leadership problem in the school.

Fourth, the CPD program, a major platform applied to learn post-1994 instructional reforms, is also not well managed. The school ranked in level-III before the coming of the principal currently in office. To state in the words of a **biology** teacher:

Our rank was level-III before some years ago, but now we consistently rank in level-II. Many factors might have contributed, one of which is the CPD. We didn't have practiced it properly. We often didn't finish the activities as per the plan. As a result, we missed the points allotted for this criterion.

Fifth, every year many teachers join the school through transfer. And since the school is located at the center of the town, teachers who are transferred to the school are veteran teachers who worked for decades in other schools. These teachers have cumulative experience obtained from working in other schools. However, the school principal; according to participant teachers rarely tried to graft this knowledge and skills and little integrate into the school's knowledge management system. Aesthetics teacher who joined the school two years ago through transfer confirmed that she neither got induction during her arrival to the school nor asked to share her experiences to the school community.

Lastly, schools need finance to support teachers' professional development. In particular, creating a learning school demands continuous learning at individual, team, and organizational level, and this needs financial resource. The school receives a total annual budget of not more than Birr 170, 000 (one hundred seventy thousand) from government and GEQIP. It also collects less than 70, 000 (seventy thousand) from internal revenue. This amount is allocated to different school activities. The total annual budget collected from the above-mentioned sources is not adequate to cover even the basic activities. As a result, no amount was apportioned to workplace learning since it is thought luxurious to allot a budget and support school-based learning. The school principal is responsible to diversify the school's income, though the effort made by the principal of C-2 is very minimal in this regard.

Consequently, not only in the school's standard evaluation but also in other performance indicators like student question and answer competitions with cluster schools, the school usually stands at the bottom rank. Participants regrettably said "we stood at back bencher in the Q and A competition." Moreover, the school ranked at the bottom in the students' performance in successive regional examinations. Thus, absence of pressure and

reward scheme from the school leadership was the most likely reason that inhibited organizational learning in the school. Of course, the school principal disclose that he applied reprimand on underperforming teachers [ያላሻሻሉ ተጨመረ ተግላጽና አጽንዖት ይሰጥባቸዋል].

ii) Failure to balance goals

Schools often work to improve students' learning performance; concomitantly, they should work to equip teachers with the required competencies. These two goals need to be fairly balanced in some way because of the fact that without competent teachers, it is hardly possible to improve students' learning achievement in its true sense. Nevertheless, the directives and actions in the case school focus more on improving the students' score performance than the teachers' professional development, though it remains aspirational.

The role of school-based learning in enhancing teachers' professional competency is paramount as compared to initial training. Thus, overlooking this learning is tantamount to overlooking student learning. With respect to post-1994 instructional reforms in particular, a school community which itself not creative, critical thinker, problem solver, and innovative cannot create students having these qualities inherent to the constructivist learning philosophy. According to participant teachers, teachers in the school are busy in organizing tutorial and make up classes, in co-curricular works, and in forum and department meetings so as to improve score performance of students. The school principal also confirmed that teachers engage in different team ups, unions, forums and committees (such as CPD, cocurricular activities, and multiple of committees like examination committee, curriculum committee, school improvement committee). Whereas, the time devoted to equip own professional capacity with those instructional reforms is said minimal. A biology teacher has described the situation in grief as follows:

We have students with different learning pace and preference. As a result, it is hard to make them progress in the same manner. Moreover, we are expected to assess students continuously, and this also needs time. We are also expected to actively engage students in the teaching learning process and at the same time cover contents as per the annual plan though the two goals contradict each other. The regular time allotted to teach and assess students according to the learning pace and preference of each student is not enough. Consequently, we must invest additional time to support students in remedial classes. Moreover, we are expected to participate in professional dialogue sessions, trainings, peer supervisions, and committee works. We often face time shortage to accomplish all these routines concurrently. Therefore, we find it difficult to get time to equip ourselves in those contents [post-1994 instructional reforms].

Science teacher said, “I have to teach at least 20 hours per week, and participate in different ad hoc committees organized to improve students’ performance. As a result, I often stay here (in the school) the whole day.” An Aesthetics teacher also observed that “most discussions organized in the school often focus ... on improving students’ test scores; though it is hardly possible to improve students’ test scores without improving teachers’ performance.”

There are also multiple platforms organized to improve students’ score performance: early grade forum and grade six and grade eight forums are particular examples. The tutorial and make-up class sessions are the strategies installed to make these forums functional. This is in addition to the platforms like clever students’ union, female students’ union, and some co-curricular clubs like science and mathematics which work on improving students’ score performance. Such unfair balance is partly attributed to overdependence on initial training teachers took in colleges and universities. Yet, that is flawed assumption.

iii) Overdose in top-down prescriptions

Literature shows that OL functions the most in flat organizational structures. However, education structure functioning all along the ladder is too hierarchical. In the case of a school, directives from the higher hierarchy reach the institution through the principal, who then communicates them to the respective departments. In this way, directives reach out the bottom practitioners (i.e., teachers) without adequate orientation on the intent of the directives. One of these directives sent from above was the new CPD program which is sent from the WEO in 2022/23. Teachers who are not well communicated about this change consider it as if it is an inconsistency caused by trainers who occasionally provide on-job training at cluster level. In addition, the WEO sends directives and checklist to schools following directions sent from the ZED. Of course, the WEO asks schools to send training needs of the school though the school did not have any documented letter send to the WEO in this regard.

iv) Old traditions (misconception about 21st developments in teaching)

Teachers in the school are veterans who lived in the profession for more than a decade (mean age=17.75 years). As a result, the way they had been taught differs from the way they are expected to teach students now. A biology teacher (23 years teaching experience)

confirmed that his past experiences in teaching per se didn't comply with the requirements of post-1994 instructional reforms; he said

The way I have been taught in the past didn't help me to be a problem solver, researcher, and explorer. This has made an impact on me. Now I am not doing this to my students. Here, many things need to be facilitated to help students become problem solvers, researchers, and explorers.

Fixation to the old ways of doing teaching and learning particularly via chalk and talk method potentially overlooks the value of the post-1994 instructional reforms. As a result, the effort exerted to learn these reform elements by the learning entities (individual, team, organizational) using the commonly used learning mechanisms like CPD, peer supervision, and on-job trainings was found to be very weak.

Opportunities for occasional trainings come from different sources like NGOs (such as USAID, UNICEF), public higher learning institutions, experts from ZED/WEO, and school supervisor and/or principal. Post-1994 instructional reforms like CA, AL, and ACR both as part of general pedagogy and as subject specific methods have been among the most commonly focused topics in the training (see letters to the school for request). However, teachers in the school complain about the inconsistency among the intent of the messages communicated during those trainings. A language teacher, a subject matter which is a bone of contention among NGOs, complain in the following way:

Training opportunities come from different sources like the WEO, ZED, NGOs, and higher learning institutions around but the message they communicate is not the same. In most cases, the following trainer uproots the intent of the training given by previous trainers, and he/she comes saying that this is not the case. For example, the training given to us today may be regarded not valid and it may be changed in the training to be provided the following year.

This felt inconsistency in communicating the reforms (fast change of meanings) crystalized the schools' and teachers' fixation to the old ways of practicing teaching, and this in turn hindered OL in the school.

V) Other factors related to OLD

Self-fulfilling prophecy/Pygmalion effect

Self-fulfilling prophecy is the expectation that schools or teachers have towards students' learning performance. In view of this, the findings particularly from Case-2 shows

that teachers had low expectation for their students, and this is a school-wide belief shared by the school community.

The school improvement program (SIP), one of the programs in GEQIP (MoE, 2008) stated that any effort of the school should gear towards improving students' performance. Consequently, the summated effect of the SIP domains namely teaching and learning, leadership, safety of the school, and stakeholder participation altogether should bring improved student learning. Although the learning of all student is a priority agenda, participants claim that students' learning interest is declining overtime. A biology teacher said teachers are feeling bored of students' declining interest and ability for learning, only a few students engage in the teaching learning process. As a result, practicing student-centered teaching is becoming very challenging. This, according to a biology teacher has a repercussion on teachers' professional learning. To put it in the teacher's own words "I am losing hope on students' level of achievement, what I observe in the classroom is not what I expect to observe." The science teacher also said "students don't want to learn," which is a generalized assumption on students' dwindling interest for learning. This is a kind of self-fulfilling prophecy in which teachers' expectation of low student achievement has hindered their engagement in lifelong learning.

Organizational Amnesia

OL requires storing the knowledge acquired through various knowledge search mechanisms for later use. This case school has been functioning since the last seven decades. The school has stored hip of documents collected in those years, but according to the participants, these documents are showcases of administrative affairs that the school has accumulated. However, documents that witness OL in the school including teacher portfolios are scant or not available. A language teacher said the school stores documents for later use but the documents she claimed to be stored were not in teaching learning per se, rather it was all about administrative issues that are officially discarded every ten years. The dialogue presented below also confirm the prevailing knowledge management gap in the school

For how long have you worked in the teaching profession? I worked for about 23 years, where have you stored the knowledge you have accumulated in those years? Umm, it is with me, but I share to my colleagues as much as I can' If you have transferred to other school, how have you transfer this knowledge to this school?

You are right; I am trying to sharing what colleagues want from me. One simple case is a photocopy machine. No one in the school is able to operate the machine; most of the teachers don't even dare to copy. I am trying hard to show interested teachers on how to operate the copy machine. To add one more case, two weeks ago, I organized a debate session on how to teach science to 8th grade students in the school. I did this not only to make other science teachers judge the debate but also to share experiences and scale up the practice. This way, I am trying to share my knowledge to the school community (Biology teacher).

A language teacher also supported the views of the biology teacher though she is not sure where this knowledge is stored. Mathematics teacher also said the knowledge is stored in me and inside the school? Would you explain it more? I submit what I worked in document form to the school, and it is the responsibility of the school leaders to keep the documentation safely. What about the knowledge of the school? Where we can find it? Uhhh said four of them just as a sign of wonder, a biology teacher replied, may be in the school administration. I explained the question then, you worked on CPD, you conducted action research in the school, and you make peer supervision. Where can we find the lessons learned from these documentations? Biology teacher replied, may be in the library and may be with the school administration (I didn't find any of these documents in the library and in the principals' office).

I asked the Aesthetics teacher, how many books you have in person related to the subject you teach (that can be used to refer about the content and the method of teaching)? She replied, I don't have books in soft and hard copies. I worked in four different schools before I came to this school. I used to refer to books from those schools but I didn't have any reference material I personally own.

Institutional loyalty/ Self-censorship/

Institutional loyalty refers to a tendency to protect the reputation of the institution they are part of, or not discussing its limitations. Participants were not willing to expose limitations they have observed in the school. In spite of the fact that the school has been continuously ranked in Level-II, their students stand out at the bottom in cluster competitions and regional examinations; they still didn't want to believe that the school is a poor performing school. Contrary to this, there is a feeling of being adequate among participant teachers. They rather attributed the failure (low score in regional examination, and in Q and A competitions) to students lack of interest for learning. Moreover, they felt that the school

was ranked in Level-II not because of its poor performance but because of its location, which they feel not conducive to teaching and learning (located near to a main road to Addis and a religious organization neighbouring it). The following attribution was quoted from one of the participants.

Your school is ranked in the bottom level in school standard evaluation, why is it so?

I don't feel this rank is given to the school because of not working hard, it is because the school compound is narrow, and there is sound pollution (cars and religious institution). I asked another teacher why we don't see posters in the school compound about the reform ideas unlike the case in other schools, and she replied 'the school compound is so small to make this', which does not seem sound enough to justify.

Reform fatigue

The school community also seem as a whole including the school principal experienced fatigue of the reforms that are sent down to their school from either the WEO, ZED, or REB. The school principal complained that the CPD was frequently changed, he said "in my career as a school principal, I saw the CPD modality changed three times, from modules sent from the ministry to self-developed modules prepared by schools, and now like a teacher discussion forum." Aesthetics teacher also complained about the overdose of reforms that are sent from above; in her own words "we have difficulty in understanding the reforms that are continually sent from above, let alone implementing them. There is also a significant difference between the bodies that provide training. Often, the training provided by one is not followed by the training provided by another." Other interviewees like the biology teacher in school also supported the above views, he said that teachers in school are tightened in routines other than the classroom role, and most of these routines are engagement in committees to discuss on the uncountable reforms sent from above.

Overall, poor leadership, old traditions, financial constraint, and too many but overlapping prescribed platforms hindered OL in the school. Consequently, the learning entities overlook school-based learning in general and the learning of post-1994 instructional reforms. The school's rank in schools' standard evaluation, its status in student question and answer sessions with cluster schools, and the passing rate of grade eight students in regional examinations could witness the limitation of the school with regard to creating a learning community that can maximize students' learning.

4.6 Cross-case analysis

The case schools are both located in the same town, and each headed by principals who worked for decades in school leadership career. Moreover, the schools were established thirty years ago and this makes them well-positioned to experience the post-1994 instructional reforms from the very beginning.

i) Organizational Learning Mechanisms

The CPD program, supervision (peer, expert, and authority), on-job trainings organized at cluster or school level are common in both case schools. This is because of the fact that the schools, as elsewhere in the country, are required to implement these instructional prescriptions. Consequently, it is mandatory for schools to incorporate these routines in their strategic (three years plan) as well as in the annual plan. And, in principle the routines have to be cascaded to every teacher's annual self-development plan.

The case schools endorse the CPD, undertake supervision, and participate in the on-job trainings organized at school and cluster level. And the analysis in both case schools shows that these routines are major mechanisms implemented by the schools to learn post-1994 instructional reforms such as continuous assessment, active learning, action research, and reflective practice (professional dialogue). Actually, this does not mean that the post-1994 instructional reforms are the only priorities of these endorsements.

Continuous professional development, as compared to others, is the major platform in the case schools utilized to learn post-1994 instructional reforms (See Chalchisa, 2011). The modality of this platform has been successively revised by the federal ministry of education³¹ to fit into the objective of developing teachers professionally. Consequently, since 2023 it is changed to a professional dialogue in which teachers teaching same or similar subjects collaboratively discuss on the contents and methods (teaching and assessment). However, the case schools differ significantly with respect to the quality and rigor of applying the learning mechanisms as shown in the subsequent paragraphs.

In case-1, CPD has a close follow up from the school principal; consequently, it starts with orientation session often given at the beginning of the year, CPD teams are headed by experienced and best performing teachers, and teacher portfolios are monitored and evaluated by the school principal. On top of this, teachers in this school have a good feeling towards

³¹MoE. 2009. Continuous professional Development for primary and secondary school Teachers, leaders and supervisors in Ethiopia framework, Ministry of Education. Ethiopia

CPD, especially after being changed to a professional dialogue modality. As a result, this platform is functioning as an effective strategy of learning those instructional reforms. Moreover, the team is governed by a principle of ‘group accountability and individual responsibility. Accordingly, individual members should contribute their share to the success of the team. Each member should refer to books or ask authorities working in higher learning institutions around on the topics (often related to teaching and learning) she/he has been assigned and share experiences to the team members.

Moreover, this school recognizes a shining teacher every month; and quality of CPD practice is one of the criteria for rewarding teachers at the end of a semester/a year. That is, participatory nature of the teaching methods, continuity and variety of assessment techniques, participation in action research, and frequency of reflective practices made in professional dialogue sessions all count in the criteria. There is a special budget (ETB 10, 000) allotted to reward shining teachers often at the end of a fiscal year.

On the contrary, in case-2 the CPD didn’t come to the attention of the leadership; unlike the condition in case-1, it begins without prior orientation training from the leadership and not well supervised and monitored; as a result, the requirements were not completed by most teachers. According to a participant (biology teacher) teacher did not work properly on CPD. They didn’t complete what they were required to complete in the academic year, and this was one of the reasons for the school to be ranked level-II. Moreover, teachers in case-2 don’t seem interested to participate in CPD, and they attribute the limited engagement to time shortage and extra workload. Thus, this platform of learning the instructional reforms is not functioning well as compared to the condition in case-1.

Table 5.1: Constructs of LO by Case Schools

OL Dimension	indicators	Learning Strategies	
		<i>C1</i>	<i>C2</i>
Construct	Knowledge acquisition,	School-based trainings (from school principal), cluster-based trainings, workshops, experience sharing and initial/in-service trainings	Occasional-school-based trainings, leaning at personal agency, Cluster-based trainings, and initial/in-service trainings
	Knowledge distribution	Sharing experiences from on-job trainings for school community (reward scheme is endorsed to facilitate distribution), publications like modules,	Top-down commands from the school principal, occasional PD activities, informal discussion between teachers, joint

	posters, pamphlets, vision and mission communication sessions	lesson planning by some teachers
Knowledge interpretation	Professional dialogue, pre and post-supervision discussions, forums (score analysis), and action research	Post-supervision discussions
Organizational memory (storage)	Computer labs, memorial Centre, minutes (shelved), personal minds	Minutes (scrambled) and personal minds

Table 5.2: Constructs of LO by Case Schools

OL Dimension	Indicators	Learning Strategies	
		C1	C2
Characteristics	Shared vision	The school community discuss on the strategic plan, annual plan, and other working documents The school vision is posted in the school's compound everywhere	-
	Learning opportunity for all staff	Structured CPD (currently professional dialogue), on-job training opportunity for all staff member at least once in a year	-
	Team learning and collaboration	Learning community organized around programs like CPD, and special structures like forums, departments, and streams	-
	Culture of inquiry, exploration & innovation	Teachers conduct action research, and rewarded accordingly	-
	Systems for collecting & exchanging knowledge and learning	Teachers take assignments and share to CPD team members the knowledge learnt from books and nearby authorities There are reflection sessions to share experiences learned from doing action researches	-
	Learning with and from the external environment	The school was a hub for experience sharing for schools & institutions all over the country.	-
	Modelling and growing learning leadership	The principal continued legacy of CPD from school leaders before him; CPD leaders in the school follow the principal in providing feedback	-

Action research is among the post-1994 reforms, particularly following TESO, endorsed to enhance organizational learning in schools; teachers are expected to improve own professional practice through action research. They are also expected to solve practical problems in their professional practice through action research. From this point of view, case school-1 is doing better. Teachers in this school conduct action researches in reasonable numbers, and those researches are rewarded at woreda, zonal and even regional level. The school leadership institutionalized a reward system for teachers who conduct action researches. Whereas, in case-2, teachers who used to conduct such researches in other schools terminated the practice once they are transferred to this school due to the fact that undertaking action research is not obligatory in the school.

School-based trainings were other strategies used by schools to learn those reforms; in this regard case-1 institutionalized school-based training as a mechanism of organizational learning. According to the school's principal, every year begins with a refreshment training, and continuous assessment and active learning are priority areas of such trainings. The training materials prepared by the school principal in successive years were well documented and stored for future use (Appendix-8). It was also a customary practice to participate in on-job trainings organized by nearby higher learning institutions, and the principal confirmed that teachers should participate in such trainings at least once in a year. Moreover, teachers who take on-job trainings elsewhere must share the experiences to the school community who did not participate in those trainings, according to the school principal and participant teachers

The minutes reviewed in case-1 since 2018/19 also show that the discussions mainly focusing on improving students' performance are strategies of learning instructional reforms in the workplace. This is because of the fact that the agendas set for discussion in those years mainly (83%) focus on teaching and learning per se.

Unlike the situation in case-1, school-based on-job trainings organized to learn the instructional reforms in case-2 are only occasional and incomplete. In addition, the training opportunities offered by local firms were not utilized by the school community. The case in point is an ICT training opportunity offered by a local firm in the town (ACD), almost all the teachers were not willing to accept the offer. Moreover, participation in school-based training is based on willingness; as a result, teachers are not willing to participate partly due to absence of incentives after participation. The other contrast is in Case-2, neither the supervisor nor the school principal organizes school-based trainings to capacitate teachers with the knowledge and skills of those instructional reforms. The exception is training organized at the cluster school by supporting entities like NGOs and nearby public higher learning institutions.

Consequently, the initial training received in colleges and universities is an equally important source of knowledge through which teachers acquired knowledge about those instructional reforms. The quotes below from two mathematics teachers in Case-2 and Case-1 disclose the contrast

I worked in different schools and I got lessons from those schools while working with many teachers. But, the most I have learned about continuous assessment, active learning,

action research and other related concepts is from the college I have been graduated [Case-2]

I acquire [knowledge about] these concepts through peer support, on-job trainings, and making connections with the teachers' education college around. For instance, we conduct action research that is recognized at zonal level. We also support each other through CPD. Moreover, I first acquired knowledge about them during my training in the teachers' college. Still, I used the modules and exercise books as a reference in my teaching career [Case-1].

In the case school-1; however, the knowledge acquired during initial training was not as such emphasized by participants.

The on-job training provided by NGOs, experts from WEO, ZED, and higher learning institutions; however, seem similar in both cases with some exceptions. Most of these training have been provided in the cluster centers for selected teachers, and the training contents mainly focus on general pedagogy or subject-specific pedagogy. The exception is teachers who participated in such training from case-1 are obliged to share the experiences obtained from the training whereas, in Case-2, training participants rarely or not required to share the experiences to the school community. In addition, unlike the situation in Case-1, participation in such training is on voluntary basis in case-2.

Whereas, experience sharing organized within schools in the cluster centers dominantly focus on recreational activities and student question and answer events in both case schools. This implies that cluster centers are not serving their intended purpose of creating a professional learning community.

ii) *Conditions fostering/hindering OL in the schools*

The case schools of this study are located in the same town; consequently, they receive every direction from the same WEO/ZED, and the working documents such as the checklists come from the same source. However, the schools are found in different clusters, and in different ranks in the school standard evaluation which is undertaken by the WEO (nationally) in every three years. In spite of this, the case schools extremely differ in various conditions; the variation in leadership is, however, stark. The school leadership in case-1 is very friendly who created a leadership atmosphere that balances freedom and responsibility through empowerment, building trust, and conviction. This has resulted in a learning community that clearly understands its responsibility. The observations from a mathematics teacher, a language teacher, and the school principal in the same order show a leadership atmosphere that is conducive for OL.

MT: in other schools, I see that the interest of the school principals dominated the school, teachers in those schools do not have the freedom even to ask their rights. **LT:** We are obliged to cover all the contents included in the textbooks.... failure to do so is considered as violation. **SP:** I have never experienced a teacher to rule over him/her in a heavy hand [every teacher knows his/her responsibility].

The school leadership in Case-1 also created conducive environment that fosters OL in the school, access to free Wi-Fi, a separate room for professional dialogue, and knowledge management centres (teacher Mulunesh memorial and computer lab) are all supportive to the ongoing OL in the school.

Table-5.3: Conditions fostering or hindering OL in the case schools

<i>Conditions</i>	<i>Case-1</i>	<i>Case-2</i>
Facilitating OL	➤ Leadership that creates conducive working environment guided by reward and pressure	➤ A learning teacher who has accumulated experience and willingness to share with other school community members
Hindering OL	➤ Overdose in top-down prescriptions ➤ Contradiction between reform elements	➤ Leadership which not participatory, not demanding and farsighted, unable to coordinate available opportunities, and reluctant to create conditions for workplace learning ➤ Failure to balance goals ➤ Overdose in top-down prescriptions ➤ Traditions ➤ Abrupt changes/change not communicated ➤ Other factors related to organizational learning disability (like self-fulfilling prophecy, knowledge management gap, institutional loyalty)

Whereas, the leadership in Case-2 lacks the qualities observed in case-1 meaning that it overlooks the participation of the school community in leadership practice, little communicates mission/vision and plans, seldom creates to teachers the opportunity for learning, and not coordinates the available resources so as to exploit them for workplace learning. Such unravelling leadership practice trims engagements in workplace learning, especially team and individual learning. The CPD that was evaluated as poorly practiced and teachers who ceased to conduct action research once they have been transferred to the school can epitomize the leadership practice that is not supportive of OL in the school. This is contrary to the situation in case-1 where the school principal financially rewards teachers who among others conduct action research and who outperform in CPD practice.

The two case schools also differ in the learning agencies; in case-2, there are learning teachers who are considered as a hub of knowledge from whom learning agencies (personal, team and the school) can learn particularly the post-1994 instructional reforms. However, in Case-1 there are no such individual teachers who are overwhelmingly identified by participant teachers; instead, team and school-wide efforts of learning those reforms seem visible more than individual efforts.

The other contrast between the case schools is observed in balancing goals. In case-1, emphasis for student learning and teacher learning is found somewhat balanced though not in the sense of equal matching. For instance, it is a must for every teacher to participate in on-job/off-job trainings and share experiences obtained to other school community. That is not the case in Case-2 school. In addition, every academic year in Case-1 begins with orientation training provided by the school principal often prioritizing on the post-1994 instructional reforms. The orientation training is supported by follow-up from the school principal, the feedbacks continuously provided from CPD leaders and the school principal on CPD portfolios are good examples of follow up. But in Case-2, evidences are not found or there is no such practice. There are various platforms established to support students' learning in Case-1 too, but these platforms unlike the condition in Case-2 operate not in the way that negatively competes to the teachers' learning. Surprisingly, despite an overwhelming emphasis to attain student learning at the expense of teachers' professional learning, student performance in successive regional examinations and in occasional student question and answer sessions is far lower than the same in Case-1.

Tendencies related to organizational learning disabilities (OLD) also hindered OL in Case-2; the findings from this school reveal self-fulfilling prophecy, organizational loyalty/self-censorship, and organizational Amnesia, and reform fatigue showcase the felt OLDs.

The community in Case-2 is not willing to disclose limitations of the school; in the contrary OL tolerates and even appreciates errors. Participants attribute every failure of the school to different factors which are external, and some of these factors do not qualify to account for the failures observed in the Case school. For instance, the school consistently ranked in Level-II, and the school community attributes this to the physical location where the school is established. They also attribute the under performance of the school in CPD activities to workload, and this a tendency of organizational loyalty, which is an organizational learning disability.

Case-2 as compared to Case-1 has visible limitation in storing the knowledge, the school principal, replied knowledge that is already learnt in the school is stored in the form of minutes, piles, and sometimes in soft copies. However, he was unable to locate most of the so called “knowledge” in the storage sites. Here, the question was rephrased and he was asked “the school has functioned for more than 70 years since its establishment, and in those years, it might have acquired a dearth of information from which teachers could learn many things; then where do you think this information is stored?” Then, he smiles and replies “let alone information of the last seventy years, I could not find the same in the last ten years; it has gone with teachers who were transferred to other schools or who retired.” Whereas in Case-1, the knowledge management centers like teacher Mulunesh memorial and the computer centers are good beginnings towards OL in the school. The training modules prepared by the school principal dominantly on contents of post-1994 instructional reforms are also well documented in the principal’s office. This shows that knowledge management gap is hindering OL in Case-2 than in Case-1.

The findings from case-2 also show traditions that favor the chalk-talk method of teaching hindered OL, and particularly the learning of post-1994 instructional reforms as the following quote from a biology teacher, one of the veterans indirectly show the negative influence of tradition on learning post-1994 instructional reforms.

The way I have been taught in the past didn’t help me to be a problem solver, researcher, and explorer; this made an impact on me. Now I am not doing this to my students. Here, many things need to be facilitated to help students become problem solvers, researchers, and explorers.

There are also factors that hindered organizational learning in both case schools: overdose in top-down prescriptions, contradiction between intent of instructional reforms, and abruptness of the changes/changes not communicated are found common between the cases. These factors through common between the cases, the intensity of their effect differs in magnitude; i.e in Case-1, the principal tried to minimize the effect of these factors in hindering OL in the school.

Regarding prescriptions (that makes the Centre-periphery relationship biased with regard to sharing the decision power), the voices from the school community do not seem count to the prescriptions from the top hierarchies, and this has affected OL in the case schools. The CPD can epitomize the prescriptive tradition, it has been changed for about three times in less than three decades partly because of the limitations experienced in the course of program implementation. Nonetheless, it has been changed with little voice formally incorporated from schools which are destined to implement the prescription. This has resulted in buy-in problem among grassroots level practitioners. The principal in Case-1 has been able to cope up with such buy-in problem by organizing series awareness creating workshops; whereas, this is not the case in Case-2 where teachers deployed in the school consider such changes as abrupt.

The application of the instructional reforms is also another factor that hindered particularly schools' learning post-1994 instructional reforms. The post-1994 instructional reforms which are constructivist in paradigm have been endorsed to create citizens who are critical thinkers, problem solvers, creative and innovative. Nevertheless, the assessment tradition applied in regional examinations does not comply with this intention, and this affected teachers' emphasis to those instructional reforms so does their engagement in learning those reforms.

To conclude, myriads of factors hindered OL in the case schools, and some of these factors are unique to each case school while other factors are shared between the case schools despite difference in the way the case schools handled the challenges. There are also factors which facilitated OL in the case schools, leadership is found among the dominant factors that facilitated OL, and particularly the learning of post-1994 instructional reforms in Case-1.

CHAPTER FIVE

DISCUSSION

Introduction

In this section, I interpreted the results obtained from the analysis presented, reflecting on their significance in relation to existing literature, theoretical lenses and own experiences. Thus, the discussion was made vis-à-vis the research questions namely the reform approach followed, magnitude of being a learning school, mechanisms of organizational learning employed, and the factors fostering or hindering organizational learning in the case schools.

5.1 The reform tradition in Ethiopia

The very intention of this section was to analyze how the post-1994 instructional reforms have been introduced; nevertheless, it also delves the reform tradition prevailed in the last eight decades. This is mainly because of the fact that understanding and reconstructing the present and being attune to the future necessitates listening to the past (Pinar, 2004; cited in Slattery, P.260)³²

The findings derived from analyses of secondary data reveal educational reforms enacted in the three regimes had little involved the voice of grassroots level practitioners. Instead, policy elites acting within the political circle dominated both initiations of reform ideas (Gershberg et al., 2023). In fact, the policy elites had continued suggestions from funding agencies such as the World Bank, UNESCO, and USAID (Mekonnen, 2013 and 2019).

Despite the three regimes' seemingly incompatible ideologies, the prescriptive reform tradition has been common to all whereby policy decisions from the national level are passed on to lower levels (Gershberg et al., 2023; Cerna, 2013) by government bodies or policy persons working on behalf of governments (Sikes 2014, Darling Hammond 2012, and Fullan, 2007; Burch, 2007). The analysis show education and especially curriculum development in Ethiopia over the years had little voices from practitioners and professionals (Kassaye, 2005; Areaya, 2008). This tradition might be thought by reform initiators to control and indoctrinate the regime's ideology (Kennedy, 2007). Nevertheless, too much prescription may develop a reluctant attitude and firm resistance among school level actors during implementation of the reforms as a result of the inadequate buy-in problem (Darling-Hammond, 2012; Hargreaves et al., 2010). It may also force grassroots level

³² Slattery, P. (2006). Curriculum Development in the postmodern era (2nd edition). Routledge

implementers to experience what Fullan (2007) calls ‘false clarity’, which is a faulty understanding of a true character of the reforms. Kennedy (2007, p.78) observes “too much centralized control impedes the implementation of change and innovation, and stifles the development and creativity among teachers.” In lieu of this, Argote, Lee, and Park (2020) has suggested participation of grassroots level actors in order to re-contextualize curricular reforms and increase their enactment.

Continuous dominance of funding agencies may decrease the relevance of the curriculum since the text adopted from the source countries of funding agencies may not be compatible with the context of the country (Crossley and Watson, 2009; Tabulawa, 2013). The findings show different countries dominated modern education in Ethiopia; the French, British, USA, Russia, and East German, for instance, were countries which influenced policy and programs including curricula (Negash, 1996; Tefera, 2005). The intervention in education reform affairs, and particularly curricular reforms of the country, especially that of the World Bank has increased across regimes (Molla, 2019). This has made the relevance of the reform ideas inadequately tailored to the country’s development needs.

With regard to the purpose of education each regime envisioned to realize, the variation among the regimes seems only in ideology each wanted to install in the generation. Consequently, ‘preparing the generation for a distant future’ seem a commonplace of the three regimes. This shows utilitarian conception of education (Debele, 2017), was the philosophy adopted by three of the regimes. Education, guided only by this kind of top-down transmission is, some claim, the silent killer, shutting down the inherent zeal towards learning (Darling-Hammond 2012, Senge et al 2012). If reforming education is limited to preparing the generation for a distant future, Senge and his colleagues (2012:25) note, “the end result is a lack of motivation and engagement, waste of their potential, and a diminishing of the contribution that they could make to society.” And this has a repercussion on schools and school communities’ effort of being a learning organization since motivation and engagement of students might have affected the schools’ readiness in being a LO.

A well thought educational reform gives space not only for economic value of education but also for other societal needs too. This is because of the fact that education which is relevant for the 21st century is defined in terms of four pillars namely: learning to know, learning to do, learning to be, and learning to live together (Delors et al., 1996). The world of work that prevails in the 21st century, which is essential to adapt oneself in a situation of rapid change, necessitates autonomous thinking. According to Mezirow (1997, p.8) education in the 21st century has to prepare a productive and responsible worker by empowering the individual to think as an autonomous agent

rather than to uncritically act on prescribed ideas. The findings were contrary to this grand assertion; that is, education reforms initiated in the country in the last eight decades overlooked change strategies other than the power-coercive one, and pillars of education other than preparation. This calls for rethinking of education and educational purpose (Wan and Gut, 2011) when reforming education, which government provides. One possible suggestion to this could be, in addition to preparing the generation to a distant future, it is important to embrace essential needs of societies living in this century and not primarily for some future role they may or may not take in the adult world (Barnes, 2011).

The three regimes also resembled each other in the priority areas they aspired to address, as well as the reform approach and voices valued. Analysis of reform documents such as prospective plans, proclamations, and policies which have been endorsed to direct the country's education help establish this similarity (Abebe, 2011; Tefera, 2005; Mekuria, 2009). Some of these issues seem competing goals which are difficult to achieve simultaneously. For instance, providing quality education for a massive number of children equitably may be hard to realize due to limited resources. This shows that a holistic view of addressing the priorities seems common to the three regimes. However, in countries where there is an acute shortage of resources, addressing all the priorities simultaneously appears difficult for a country like Ethiopia. Large scale evaluative researches undertaken to study the status of education in three of the regimes show weaknesses of the Ethiopian education in the last eight decades have been linked to these issues. To mention some of these, meta-evaluative research works undertaken like ESR (1972), ERGESE (1986), and the ETP study (1993) reported problems related to access, equity, quality, relevance, and efficiency. The nationwide education research recently conducted to develop the country's education roadmap (2018-2030) also identified these priority areas as issues which need future action (MoE and ESC, 2018) after 46 years of investment in education.

The strategies set to realize the goals of education in each regime also resemble one another; they are directly or indirectly related to teachers, school administrators, curriculum and resources. In other words, accomplishing the purpose of education is equated to recruiting qualified teachers and school administrators, quality curriculum, and resources. Of course, there is nothing wrong in prioritizing recruitment; but, bringing talented teachers/school administrators into the profession from the top tier, which each regime anticipated to accomplish, was unrealistic and not achieved.

Similarly, quality curriculum emerges from quality professionals at the grassroots level, who have in fact professional autonomy. In the absence of these professionals, curriculum development

falls by default to foreign experts who know little about the context where reformed curriculum is being implemented. This tendency may lead to problems related to relevance, a problem which has been experienced by three of the regimes. They may also bring the forms and contents of education which a country provides under de facto subjugation of countries which give expertise support.

To sum up, though they differ in ideology, it seems to be beyond speculation that reforming education in the last three regimes has shown little variation with respect to the reform approach they followed (top-down), their purpose of reforming education (preparation for the next stage of life), priority areas they aspired to address (access, equity, quality, relevance, and efficiency), strategies they set to materialize purpose (teacher, school administrator/leader, curriculum and resource), and actors they involved in successive reforms (little voice to grassroots level implementers). According to Resnick and Hall (1998) repeatedly reforming education using the same assumptions and theories is the underlying reason behind the failure of successive reforms; and suggested that “if today’s reform goals ... are to be met, the past procedures, and theories and assumptions need to be changed, p.92”

This is partly because reforms across the three regimes seem to follow a supply driven model; in which the main actors on the demand side (teachers, parents, students...etc) seem voiceless (Abebe, 2011). This is the typical feature of governments who embrace the power-coercive strategy to reform education (Chin and Bennes, 1994; Quinn and Sonenshein, 2008; Nickols, 2016; Hofman et al., 2017).

5.2 Magnitude of OL in Schools

The schools surveyed in the quantitative phase of this study show certain characteristics of a learning organization in both thinking and action dimensions since the mean SLO score was found to be slightly above average (M=3.38). The mean for the action dimension (M=3.42) was found almost equal to the rating in the thinking dimension (M=3.44). But, in some sub-scales of the thinking and action dimension, the results show varying mean scores. For instance, the schools were found relatively better in developing shared vision (M=3.77) and in interpreting the knowledge acquired (M=3.66).

The practice of stating school visions began in Ethiopia since 2007 following the launching of the school improvement program. Since then, schools have been required to set clear vision, and this vision has to be set in collaboration, and be shared with stakeholders. The relatively high mean score shows that the practice of both developing and communicating visions with the school

community and stakeholders seem promising since it is a powerful motivator of OL in school systems (Kools and Stoll, 2016; Kurland et al., 2010). However, previous studies conducted in the regional state (Gebresellasie, et al., 2011; Melesse, 2016; Mohammed, 2011) and the findings of the qualitative study from the case schools in this study reported contradictory findings since school missions and visions, especially in poorly-led schools were prescriptions from the ministry of education adopted by the school principals with little or no communication to school practitioners.

The results also show a high mean score for the interpretation sub-scale regarding learning the post-1994 instructional reforms. However, qualitative findings from previous study (Tadesse, Kenea, and Woldemariam, 2022) demonstrate that this interpretation does not empower teachers to develop context-specific understandings of these reforms. Instead, school leaders enforce uniform interpretations aligned strictly with top-down prescriptions—regardless of the subject matter, the grade level, and student population teachers teach. This contradiction suggests superficial compliance rather than genuine pedagogical adaptation. Whereas, the level of learning in some characteristics of a LO like establishing a culture of inquiry, exploration and innovation ($M=3.31$), and in learning with and from the external environment ($M=3.11$) was found low. In the same vein, the success in knowledge acquisition was found to be low ($M=3.28$). Freedom to interpret knowledge, inquiry, exploration and innovation, and learning with and from the external environment require double loop learning (Argyris and Schon, 1978) and explorative learning (March, 1991). The LO features, and particularly those with lower mean values require practitioners unlearn and reframe knowledge; and this demands a school environment where individuals and teams are encouraged to take up the challenge of experimenting with new way of doing (Coopey and Burgoyne, 2002). And the low mean scores in these features of a LO were found linked to the top-down reform tradition that overlooks the voices of grassroots level practitioners (Tadesse et al., 2022). Consequently, instructional reforms endorsed by the government since 1994 have been all what schools know from the very beginning.

Moreover, the mean for knowledge acquisition was found low, and this mean score in knowledge acquisition might be an indication of absence of other knowledge acquisition strategies except the congenital one, which is the combination of the knowledge of post-1994 instructional reforms inherited at the schools' inception and the additional knowledge acquired from the neighboring schools established prior to its birth. Other strategies of acquiring organizational knowledge like experimental learning, vicarious learning (analysis of other competent schools' practice), and grafting (scanning and embedding knowledge of a new staff member) seem either

overlooked or wrongly applied to install the prescriptions into the school system with absolute fidelity. The reservations in using other strategies of acquiring organizational knowledge may lead to reluctance to take actions towards creating LO. The low mean values observed in action dimension of a LO like establishing a culture of inquiry, exploration and innovation ($M=3.31$) and learning with and from the external environment ($M=3.11$) could be typical features to confirm absence of freedom to use other forms of knowledge search or acquisition (Huber, 1991; Kools and Stoll, 2016).

This shows the lack of freedom for schools to give contextual meaning, and for teachers to give own meanings for those instructional reforms with respect to the subject they teach, experience they accumulated, and students they teach. Rather, what is interpreted is the knowledge acquired from prolonged tradition of prescribed instructional reforms, which is the same as what is stored and disseminated. This may make workplace learning superficial dominated by top-down flow of instructional knowledge and superficial professional learning (Coopey and Burgoyne, 2002). Whereas, the bottom-up learning line both at school level and in the education hierarchy as a whole seems overlooked since the orthodox instructional knowledge worth of learning is the knowledge prescribed from the top. In OL literature; however, voice of teachers in education reform affairs was found strongly and significantly correlated with these features and constructs of OL (Marks and Louis, 1999). Jack and his colleagues (2003) also reported schools seldom make changes from what they have been doing in the past, when power is concentrated in the hands of education authorities, and that makes them exercise their role routinely with very few signs of OL.

Thus, unless this reform tradition is challenged, double-loop and higher level OL could be inhibited (Coopey and Burgoyne, 2002; Argyris and Schon, 1978), and OL in schools may likely be limited to at most what March (1991) called exploitative learning, learning organizational routines in a stable environment. This implies exploration learning which provides a platform for new knowledge construction for improving existing practices in a more radical way (Zhang and Wong, 2018) would either be overlooked or missing.

Acting Learning Agencies in the Schools

OL in school setting, like in corporate organizations, operate at individual, team, and organizational level. The results from the survey phase of this study show that team was the agency with the highest level of organizational learning followed by the school one. Whereas, OL at individual level was found the least and below average. The qualitative findings from the case schools also complement the results of the survey. This result is also supported by scores from the

licensing exam which is individually administered for teachers and school leaders to certify them for acquiring professional competencies. The share of primary and middle school teachers who passed the licensing exam and got licensed at the national level was as low as 23 percent (MoE, 2021) partly implying the limitedness of continuous learning at individual level.

The variation between school categories also appears similar across the learning agencies with the highest difference between Level-II and Level-III schools for team learning agency. According to Senge (1990), teams more than individuals are the fundamental learning units for organizational performance. Scholars in the OL literature (e.g., Sallán, et al., 2022; Marsick and Neaman, cited in Jack et al., 2003) argue that learning must occur at the level of the person, the group and the organization itself before one can speak of a learning organization. In particular, limited learning by personal agency may have a negative consequence on other learning agencies (team and organization) since it is a fundamental knowledge that is shared by teams and then by schools as organizations (Collinson et al., 2006, p.109). Hence, the low mean score for personal agency indicates absence of experimentation and self-reflection on one's own practice, limited learning from what others are doing, and reluctance in the course of carrying out daily activities (Lohman and Smaller, cited in Sallán et al., 2022).

School and teacher-related variables to SLO

The school standard guidelines (MoE, 2014) endorsed a school grading criteria which in fact resembles to the traditional letter grading system. The decision is based on schools' performance in input (25%), process (35%), and output (40%) elements of school effectiveness. The input elements include school facilities and buildings, human and financial resources, the quality of the learning environment, and the clarity and alignment of the school's vision, mission, values, and plans. The process components constitute the learning and teaching practices, including how students learn and teachers teach, the relevance of the curriculum, assessment methods, monitoring and evaluation systems, and partnerships between the school, parents, and the community. whereas the output category covers schools' and students' learning outcomes, students' personal development, teachers' and educational leaders' professional development, and the participation of parents and the local community (ibid). Accordingly, schools which received performance assessment score below 50% are categorized as 'below standard or Level-I' schools; between 50 and 69.9% are categorized as Level-II schools'; and 70 to 84.9% are Level-III schools', and schools that score 85% or above are above standard or Level-IV schools.' The results of this survey revealed that Level-III schools had significantly outscored Level-II schools in SLO measures (in both SLO

dimensions), which is promising to install a learning culture in the future. The strong performance of L-III schools in relation to the learning organization (LO) is likely due to the fact that the criteria used to classify schools into the above-mentioned categories, especially in the process and output elements share some characteristics with those of a learning organization.

The variation implies that the process element of the school standard guideline endorsed by the ministry has incorporated some elements of a learning organization. Specifically, the process element has criteria on teaching and learning, curriculum, assessment, monitoring and evaluation, and partnership between stakeholders (MoE, 2014). Out of the 61 indicators set to measure school performance in process quality, 26.13% seems directly linked to constructs or characteristics of a learning organization, which is a good beginning for establishing a full-fledged organizational culture to undertake embedded learning. Moreover, there was a statistically significant variation between Level-II and Level-III schools as a result of perceived CPD implementation in the sense that schools which reported a better level of CPD implementation had greater mean SLO.

In fact, professional development which is tailored to and contributes to developing professional habits and norms of team work and experimentation (Little, in Wilson and Berne, 1999), could result in a learning school which is characterized by availability of continuous lifelong learning that shapes both thinking and way of doing (Collinson et al., 2006; Guskey, 2002). On the other hand, the level of SLO was not promising in schools where low CPD implementation prevails. Poor CPD is characterized in the literature in terms of seasonal workshops, mass trainings from outside and intermittent on-job trainings (Wilson and Berne, 1999; Gyamtso et al., 2017). Instead, organizational learning, one which is embedded in the school system, works best for context-bound learning and growth (Fullan, 2007; Senge et al., 2012). The case study results discussed in the subsequent section confirms the promising level of SLO reported in Level-III schools and in schools where CPD implementation has been reported exemplary. Overall, school level and CPD implementation were the variables which accounted for the variances in being a learning school.

Surprisingly, all school and teacher level variables jointly accounted to only to 12% of the variances in SLO, which leads to the conclusion that variables other than school level, CPD, teacher qualification, experience, career ladder, and subject matter taught might have accounted for the variation in organizational learning. This is uncommon since these variables especially career ladder and qualification are positively associated to a learning school in the literature (Ho, Lee and Teng, 2016; Jack et al., 2002). For instance, according to Jack et al. (2002), OL is inhibited or facilitated by gender, teaching experience, and teacher qualification. Similar studies also reported

the role of veteran teachers in promoting creation of professional communities in a learning school. On the contrary, schools staffed by novice teachers complicate creation of professional communities using OL (Scribner et al., 1999). The contrasting results from the present study might be explained in terms of the leadership role played by education authorities in the hierarchy since leadership is reported to be the highest predictor of OL in school context (Leithwood, Jantzi, Steinbach, 1995; Fullan, 2007; Jack et al., 2002; Leithwood et al., 1998; Shega, 2017; Silins et al, 2002).

5.3 Organizational learning mechanisms in the case schools

Since the 1994 ETP, and particularly following the official endorsement of TESO in 2003, there were reforms that aim to transform classroom practice to the constructivist paradigm, particularly to social constructivism (MoE, 2013). The reform elements have been made part and parcel of the initial and in-service teacher training programs. Contrary to the aspirations, previous studies in Ethiopia consistently show that teaching and learning process has little changed from the modality that had been carried out in pre-1994 era (Dufera, 2006). This section tried to discuss how the primary schools have learnt these reforms in their school context by taking two extreme cases identified following a quantitative survey. The organizational learning theory, change theories, and concepts of professional learning communities informed my understanding in unpacking how the case schools learnt those reforms.

From organizational learning point of view, learning schools search for, interpret, disseminate knowledge, and store the knowledge for later use (Huber, 1991). Moreover, they have to have shared vision, create continuous learning opportunities for all staff, promote team learning and collaboration, build a culture of inquiry, exploration and innovation, and need to establish systems for collecting and exchanging knowledge and learning. They must also exercise learning with and from the external environment and model and grow learning leadership (Stoll and Kools, 2017). While executing the cognitions and actions of OLT, learning schools grow into a professional learning community (Louis, 2016) and this learning takes place by individual, team and organizational learning entities (Argyris and Schon, 1978).

The findings particularly from C1 disclose that the school applied different organizational learning mechanisms (OLMs) in the move towards a learning school, and especially in learning those reforms. These OLMs are institutionalized structural and procedural arrangements which LOs employ to search for, disseminate, interpret, store, retrieve, and use the information for a better organizational performance (Popper and Lipshitz, 2000; Schechter and Qadach, 2012). These

mechanisms that the community in C1 applies to learn those instructional reforms include CPD, supervision, on-job trainings (in-school or outside), forums, and departmental meetings. Previous studies also show similar or related OLMs that form the basic building blocks of the learning mechanisms like peer observations, monthly departmental meetings, monthly whole school meetings, and meetings of teachers with coaches and mentors. Added to this, performance reports are among the OLMs enacted by a learning school to learn reforms related to teaching and learning (Schechter and Tischler, 2007), which in this study is represented by performance evaluation as observed in C1.

On-job trainings organized out of school by the WEO/ZED, NGOs, and the nearby higher learning institutions often take the form of a workshop, and post-1994 instructional reforms particularly related to active learning, continuous assessment, and action research are priority contents. Studies show that workshops that have the required quality are among the OLMs which have a positive contribution to OL in school context (Avidov-Ungar, 2016).

Continuous professional development is; however, a dominant OLM specifically devoted to the post-1994 instructional reforms. Since it is compulsory to all schools, it contributes to create learning opportunity for all staff given that there are factors fostering OL in the school (Park and Kim, 2018; Leithwood et al., 1998). The shift from a general pedagogy approach to a subject-specific approach since 2020 appears to be a crucial decision that has fostered a positive attitude toward CPD among the C1 community. This implies creating a learning community in schools appears easier when professional development is directly related to the teachers' day-to-day practice and well-tailored to the subject they are teaching. Studies related to professional development consistently support this finding (Holloway, 2006; Guskey, 2002; Silins, Mulford, and Zarins, 2002; Fullan, 2007) that OL particularly related to teaching and learning positively affects teachers work, and improves the way teachers undertake classroom performance. Of course, the decision alone may not help schools to grow into learning schools if not supported by factors that foster OL particularly good leadership (Fullan, 2007) as explained in the next section. Moreover, the learning mechanisms which seem uncoordinated need to make comprehensive so that all other teacher learning mechanisms could be subsumed in it. However, when such OLMs are ineffectively led, they result in time constraint and consequently to teachers' resistance to buy-in the instructional reforms (Pinheiro and Alves, 2024) as in the situation in C2.

From OLT point of view, school-based trainings, cluster-based trainings, workshops, experience sharing and initial/in-service trainings constitute knowledge acquisition mechanism

particularly applied in C1. The knowledge acquired is distributed among the school community members through mechanisms like sharing experiences from on-job trainings, publications like training modules, posters, pamphlets, and vision and mission communication sessions. Professional dialogue, pre and post-supervision discussions, forums (score analysis), and action research reflections are the mechanisms the school community employs to interpret the knowledge. This knowledge is stored in computer labs, memorial centre, minutes (shelved), and personal minds (Cheng, 2020). The case schools resemble in the knowledge management system (KMS) they apply except that the KMS in C2 lacks quality and rigor; and the process in C2 is dominantly a top-down one which is not shared among the school community. This finding is consistent with previous findings by Skunčikienė, Balvočiūtė, and Balčiūnas (2009), which compared learning organization and traditional organization vis-à-vis the change management strategy and style of management they employ. The results by the same authors show traditional organizations apply a top-down change management strategy and a style of management based on control, which is similar to the coercive approach coined by Chin and Bennes (1994). Whereas, learning organizations create a learning climate and display shared leadership and assistance training as the main feature of change management strategy and leadership style respectively (Ortenblad, 2004).

Despite the fact that the absence of the features of a learning organization in C2 unlike the constructs needs further investigation, this finding implies that the communities in C2 are at hibernation stage waiting for favorable conditions to display the characteristics of a learning organization. It is also asserted from this finding that the outputs from the knowledge management strategies and mechanisms are not influencing practice in C2. Although the relationship between thought and action is not linear (Rømer, 2015), the consistent underachievement in students' test score and overall school performance may support this assertion.

Overall, C1 and C2 were found in sharp contrast with respect to creating a learning community; the school principal in C1 worked in great commitment to institutionalize the post-1994 instructional reforms. Consequently, his school was very successful in many parameters; whereas, the school principal in C2 lacked all the successes observed in C1. Nevertheless, the system lacked mechanisms to reward or punish the leadership based on performance; these two principals have been in position for a decade without personal reward or punishment. Whole system change, however, comes when change management is based on reward and pressure (Fullan, 2011; Sinek, 2009) and particularly successful OL among others lies on rewarding learning (Jamali and Sidani, 2008).

C1 outperformed C2 in the rigour of employing OLMs, and in school performance including students' performance in regional examinations. Although studying the effect of being a LO on students' achievement is not the concern of this study, the findings show being a learning school has positively contributed to it. The outstanding achievements of C1 in students' performance, for example, in regional examinations, early grade assessment, and continuous question and answer sessions might be accounted for the school-based learning that prioritized the post-1994 instructional reforms. Similar assertions also reported in previous research findings (Hussein et al., 2014; Silins et al., 2002; Collinson, Cook, Conley, 2014). Other research works consistently show OL when moderated by leadership often transformational or servant increased student performance (Mulford and Silins, 2003; Mulford, Silins, and Leithwood; 2005).

The finding from C1 also shows the commitment to school-based PD is a legacy from former school leaders, and this tradition has contributed in sustaining teacher learning community. When the organizational status quo of resisting reforms and previously established standard operation procedures in the school are changed due to good leadership, the likelihood of accommodating changes will increase (Gaspar and Hayden, 2017; Gairín-Sallán, Diaz-Vicario, Barrera-Corominas, Duran-Bellonch, 2022) so does to instructional reforms. One of the mechanisms C1 applied to change the status quo and old operation procedures is communication that benefited the school as knowledge sharing strategy. That is, the post-1994 instructional reforms were well communicated to the school community; and in the pursuit of reforms, communication helps to build consensus, cooperation and support among practitioners (Haider, McLoughlin, and Scott, 2011), and in particular, in a top-down policy environment, leaders follow up and communicating directives play paramount role for learning those instructional reforms especially in teams and school-wide learning (Gaspar and Hayden, 2017).

The findings also show OLMs in place favours team and school-wide learning; whereas, the same for individual learning were either implicit or didn't exist, and this finding is complemented by the quantitative results of this study. OL literature posited that individual learning is the building block for other learning entities (Fauske and Raybould, 2005). The cases also showed that there were learning individuals in stagnant schools and stagnant teachers in a learning school. The biology teacher in C-2 can showcase this reality, who displayed all the constructs of OLT (knowledge acquisition, storage, interpretation, and retrieval). However, the presence of learning individuals in an organization may not be a guarantee for being a learning organization (Crossan et al, 1999).

Besides, the situation in C2 confirms previous findings that states a mere gathering of people cannot represent a learning team (Senge, 1990; 2012).

Improving students' learning performance is at the center of the school improvement program (SIP) in Ethiopia (MoE, 2007); this initiative is directly linked to the concept of OL. Though endorsing the SIP seems a decision worth doing, students' learning achievement in the case schools is understood in terms of performance in paper and pencil tests, particularly in regional examinations. This might lead the school community, especially teachers not to take the instructional knowledge acquired through the OLMs into their classrooms. Instead, they prefer to impart knowledge (teaching the test or teaching for the test) following the traditional approaches. Of course, the case schools, especially C1 employs score analysis to improve classroom practice and professional learning. Nevertheless, the information derived from quantitative scores alone rarely helped schools to significantly improve both: school-based professional learning and classroom practice. Thus, it is possible to hypothesize that if not the student assessment tradition is tailored to the professional development, the gains from professional development programs hardly influence classroom practice. Consequently, teachers teach not only in the way they have been taught but also in the way they are required to do assessment. Previous studies revealed that if teachers' conceptions of assessment remain unchanged or unchallenged, it is difficult to bring constructivist views into classroom practice (Shepard, 2001; Brown, 2003; Amua-Sekyi, 2016) even if the professional development packages entertain this view. Moreover, schools and school community often commit themselves for what they are accountable to, and in Ethiopian context, quality of education is often heard gauged against students' score performance.

The finding from C2 shows where there is no continuous learning opportunity in the school, the experiences they have acquired during the initial training seems the sole instructional knowledge base. Such knowledge is obsolete and misses the idea that schools are valuable places for teacher learning (Musset, 2010; Oleson and Hora, 2013). Researches conducted by change theorists, organizational learning theory, and community of practice (Fullan, 2007; Senge et al., 2012; Fullan, 1991; Gills and Hargreaves, 2006; Louis, 2016; Mutton and Burn, 2024) suggest that learning to teach is a complex activity that needs a cumulative experience, not a one-shot initial training.

The findings also show that initial trainings were the source of instructional knowledge particularly in schools where change is stagnant, this is what we can infer from schools like C2. In

such schools, teachers often teach in the way they have been taught and school performance and students' academic achievement in such schools is low.

Overall, the OLMs discussed so far were all top-down prescriptions; thus, the difference in the two case schools was in the quality and rigor of employing those OLMs. There are; however, innovative OLMs which are unique to every learning organization, though these OLMS work in a bottom-up or hybrid reform environment.

Finally, OLMs particularly focusing on instructional reforms is an under-researched issue implying that more research efforts are needed to expand the horizon of knowledge in OL literature. The relation between the LO constructs and characteristic features, is also complex that could be a potential research agenda for other researchers.

5.4 Conditions fostering and inhibiting OL in Schools

Facilitators to OL

The findings show the Case schools differ in being LO and particularly in learning post-1994 instructional reforms endorsed to change classroom practice from mere chalk and talk approach to participatory approach, and from behaviorist to constructivist paradigm (İnal, Akkaymak, Yildirim, 2017; Altinyelken, 2010). Various factors accounted for this variation, but the variation in leadership overwhelms other factors.

In Case-1, leadership played a facilitative and supportive role in creating a learning school, the principal applied participatory leadership, provides for teachers' professional freedom, and creates conducive environment for workplace learning. These opportunities created difference in the quality and rigor of learning those instructional reforms. Previous studies consistently show that leadership is a determinant factor placed at the top of creating a LO in school context (Dibbon, 1999; Jack et al., 2002; Bowen, Ware, Rose, and Powers, 2007; Beabout, 2014; Park and Kim, 2018; Pasamar, Diaz-Fernandez, de la Rosa-Navarro, 2019) since good leaders create the right condition that facilitate such learning in the workplace (Şahin and Cemaloğlu, 2015; Gairín-Sallán et al., 2022). In the context of learning reform initiatives, organizational support for professional learning increases the likelihood of institutionalizing the reforms (Gallucci, 2008). This study also supports previous findings, but the leadership style applied by the school principal in Case-1 is based on conviction inherently guided by principle of servant leadership which focuses on relationships and persuasion rather than command and control. The principal's sayings "I never faced a teacher to rule over him/her coercively...my very purpose is to serve the society the brought me up" and the

terms/phrases coined by the participants like teacher-friendly, professional freedom, empowerment, and trust about this principal affirm the servant leadership style followed by him. This trust and friendly relationship with teachers (Nuchso, Tuntivivat, Klayklung, 2016; Leithwood, Leonard, and Sharratt, 1998) supported by reward schemes (Fullan, 2007) motivated teachers to actively participate in team and school-wide learning platforms like the CPD, forums, and other on-job trainings organized in and outside the school, and are accountable for organizational learning to take place (Jack Lam and Nicholas Pang, 2003).

OL works best in organizations where transformational leadership atmosphere prevails (Pasamar, Susana, Mirta Diaz-Fernandez, and Ma Dolores de La Rosa-Navarro, 2019; Fullan, 2011; Lam and Pang, 2003; Leithwood, Leonard, and Sharratt, 1998), but there are also studies that reported the paramount role of servant leadership in establishing a school-based organizational learning culture'' (Tsarkos, 2023; Glessner, 2016) by fostering growth and development for teachers (Kilag, Diano, Malbas, Mansueto, Villar, and Arcillo, 2023), and the findings from Case-1 add up to the exiting knowledge base that place servant leadership as a best fit to create a LO. This has implication for trainings organized to cultivate school principals in initial and in-service trainings that servant leadership style is at least a competing style of school leadership particularly in creating a learning community in school context.

Whereas; the findings of Case-2 confirm such leadership conditions were limited or did not exist at all so did the practice of learning those reforms. Previous studies also show teachers' motivation to engage in organizational learning is impacted if principals set a good example for learning and actively participate in it, but without such leadership atmosphere, the implementation of OL seldom succeeds (Sheng-nan and Da-ming, 2015).

In addition, the facilities like the ICT center, knowledge management center, and access to free wi-fi created organizational learning divide between the case schools. Accordingly, the practice of learning those reforms by the school community in particular and growing into a LO in general in Case-1 was fostered by these facilities. However, the lack of these facilities in Case-2 hindered OL in the school, particularly the learning of instructional reforms. This finding is consistent with previous findings (Sallán et al., 2022; Sheng-nan and Da-ming, 2015) that reported the positive role of these facilities for workplace learning.

Barriers to OL in Schools

This study shows that various factors hindered the learning of post-1994 instructional reforms in particular and OL in general in the case schools. Studies show the likelihood to learn instructional reforms initiated by the schools themselves (Desimone 2009; Desimone and Garet 2015, cited in Taddese and Rao, 2022) or in blended approach (Fullan, 2007) are more than those initiated following the top-down approach. In the context where this study was conducted, the instructional reforms have been all prescribed. The Minister of Education by the time when the ETP was endorsed once wrote me via email the following to my question “how was the pedagogical reforms like student-centered learning, continuous assessment, reflective practice, action research...etc were introduced into the Ethiopian education system?”

...As you may know, these concepts have been in use internationally for a long time and also recommended as effective pedagogies by many educationalists and [the] UNESCO; thus, it was necessary to use it in our system [September, 27/2019].

The email supports Seife’s (2020) argument that states the unconditionality of adapting Western education system to the post-1991 government of Ethiopia since the interest of the education policy was political than national development (Seife, 2020). The message from the minister also confirms the source of these pedagogical reforms are authorities (Educationalists and the UNESCO) other than the practitioners (school community), and it was from these sources that the reform elements were adopted with little voice from school community. Instead, the federal government provides instructional scripts for teachers, and these instructional scripts were initially prepared by experts from the American Institute of Educational Research, AIER (Tadesse et al., 2022). The CPD is one of the reforms that is endorsed by the government following the prescriptive approach to equip teachers with the skills and knowledge of post-1994 instructional reforms (Gemeda et al., 2013; Tuli, 2017). Such a prescriptive approach followed and sustained to endorse those reforms delayed the learning of instructional reforms in the case schools. The finding from this study is consistent with previous research findings that reported the negative effect of prescription on workplace learning (Bowen et al., 2007; Taddese and Rao, 2022; Tulu, 2019; Desimone, 2009; Tadesse and Kenea, 2022). This might be because of the fact that purpose of reforms introduced without participating grassroots level practitioners are perceived as mere political than educational by the practitioners (Fullan, 2007). This creates reluctance in the case schools to buy-in those reforms, and consequently to reform fatigue.

The problem existed in both schools, but in Case-1, the school leadership continuously organizes awareness creation workshops for the school community, and this is substantiated by self-developed training modules. Consequently, intensity of the hindrance resulted from prescription seems minimized in Case-1 due to the participatory leadership, continuous follow-up, and reward scheme endorsed by the school principal. By doing so, the principal in Case-1 was able to create what William (2023) called ‘organizational champions.’ Moreover, the leadership atmosphere which is based on the principle of serving others likely minimized the intensity of the resistance from teachers in learning those reforms while they are in the workplace. Nevertheless; in Case-2, such opportunities were limited or didn’t exist at all. And the findings from Case-2 are consistent with previous findings that reported the failure of professional development programs in Ethiopian public schools (Taye, 2015; Hindeya and Endawoke, 2013; Chalchisa, 2011; Desta et al., 2013) and particularly the failure of constructivist reforms (Dagnaw, 2017).

If a government with entrenched tradition of prescription aspires to put leadership contribute for school-based learning; the functional strategy, according to Brooks (2008), is to change and improve leadership practice. Moreover, there is a consensus that reforms in teaching and learning improves schools’ pedagogical practice only when teachers get significant opportunities from leadership to learn how to improve teaching and learning (Cohen and Hill, 2008). In the contrary, in the context of top-down reform environment, teachers feel mood disorders and suicide tendency and over-high pressure and resignation (Cheong Cheng, 2009).

Previous studies also show organizing continuous on-job training opportunities around reform elements increase teachers’ commitment to buy-in those reforms (Fullan, 2007). The trust established between teachers and the school principal also supported to create champions who advocate the functionality of these reform elements for students learning, which is one facilitating condition to learn the instructional reforms (Williamson et al., 2024).

Limited coherence between the instructional reforms was found another barrier for learning those reforms. The constructivist pedagogical reforms from which the reform elements have been traced require to construct new and own knowledge that is fit to the context (Schwartz, Lindgren, and Lewis, 2009); contrary to this, schools are required to comply with the prescriptions from the top (directives on how to carry out the reforms including sample lesson plans are sent from the top as a standard of operation). Consequently, teachers in the Case schools were challenged to accommodate the fidelity curriculum (that must be covered within the given instructional time) and the co-construction of context relevant knowledge by engaging students. Moreover, there is a

consensus that a constructivist-tailored assessment should examine students' abilities and dispositions to construct new knowledge, not just execute old knowledge (Schwartz et al., 2009, p.35), but the prevailing assessment tradition, particularly practiced in regional examinations didn't comply with this assumption. Consequently, preparing students for traditional paper and pencil tests, particularly in Case-2, is prioritized over professionally equipping the school community in the competencies of post-1994 instructional reforms. This implies the lack of coherence among reform elements (pedagogy and assessment) had deleterious effect on the schools' commitment of learning the post-1994 instructional reforms.

In addition to leadership, barriers like outmoded conception of teaching and learning and OLDs (self-fulfilling prophecy, self-censorship, Golem effect, and organizational amnesia) were hindering factors unique to Case-2

The school community's conception of teaching and learning in Case-2 was found dominated by tradition, which doesn't accommodate to policy aspiration regarding how teaching and learning should take place. This conception of teaching and learning challenged the practice of learning those reforms such as active learning, continuous assessment, action research, and reflective practice so did the teacher's commitment of learning these reforms since holding on the status quo is a challenge to OL in school context (Dibbon, 1999). Local studies previously conducted also supported this finding in that teachers in Ethiopia favor transmission of knowledge over reciprocal exchange of ideas and joint construction of knowledge due to inherent epistemic belief in behaviorism (Gemeda and Tynjälä, 2015). Moreover, while research consistently shows that teachers tend to teach as they were taught (Oleson & Hora, 2014; Darling-Hammond et al., 2005), the findings from Case-2 refine this claim further: Teachers' instructional practices align more closely with how they are expected to assess students. In fact, poor leadership exercised in the school might have decreased the school's community's zeal of learning those reforms, and inclined teachers to stick to tradition, which is chalk and talk and paper and pencil dominated. However, in school context where school-based learning is exercised, teachers may not necessarily teach in the way they have been taught, the findings in Case-1 could at least challenge the prevailing assertion of inheritance, since teaching is conceptualized as a craft that could be best learnt in the workplace (McNamara, Murray, Jones, 2013).

Self-fulfilling prophecy was another barrier that hindered the learning of those reforms in the school; it refers to the expectation that schools or teachers have towards students' learning performance. Previous studies consistently prove that this tendency affects not only students'

performance but also teachers' classroom behaviour (Zajda and Zajda, 2021; Sheng-nan and Daming, 2015). As a result, in schools where students are perceived outstanding, the likelihood of teachers to involve in OL is high, while it is not the fact in schools where students are perceived poor achievers. The tendency of self-fulfilling prophecy, particularly the Golem effect, appears to be a shared attitude in Case-2. This tendency has hindered the learning of instructional reforms to the point of becoming an organizational learning disability. The quote 'I am losing hope on students' level of achievement, what I observe in the classroom is not what I expect to observe' is an epitome for the low expectation that the school community develops towards students. The Ministry of Education endorsed the teachers' professional competency standard (MoE, 2012)³³, and teachers are expected to professionally prepare themselves vis-à-vis this standard. However, generalized belief of underestimating students discloses a firm belief of representing students as a standard against which classroom practice should operate. And the tendency stands against the underlaying assumption that the principal role of teachers should be teach all students and help them master learning (Yun, 2007). In fact, in the name of quality disaster, there is an entrenched stereotype of tagging a generation that comes after not fit to the curriculum they are in change of learning. This tendency is reflected even in policy researches conducted to reform the country's education system such as the Education Sector Review, Evaluative Research on the General Education System of Ethiopia, and recently the Education Roadmap. Thus, it seems sound to hypothesize that the self-fulfilling prophecy is not limited to Case-2, but it is a shared belief that consistently prevails in the country's education system across regimes.

Organizational loyalty was another barrier related to OLDs, the findings from Case-2 show participants were unwilling to disclose limitations they observed, and this sense of organizational loyalty or self-censorship hindered the learning of those instructional reforms since they lost the opportunity to learn from mistakes. Organizations including schools which are built into a LO are tolerant to errors (Argyrious and Shon, 1978), and learning from mistakes has been proved to be an important facilitator in creating a LO (Weinzimmer and Esken, 2017). Thus, a tendency of self-censorship that prevails in Case-2 might have resulted from authoritative leadership, and it negatively affected learning opportunities and overall performance of the school as it is observed from the school's standing in cluster competitions, regional examinations, and school standard evaluation.

³³ Professional standard for Ethiopian School teachers (MoE, March 2012)

The other barrier related to OLD was organizational amnesia; a term that directly describes the organization's apparent inability or unwillingness to remember and learn from its past experiences. This OLD highlight the repeated loss of valuable knowledge and the tendency to forget lessons learned, leading to redundant efforts, and it is directly related to Senge's (1991) concept of delusion of learning from experience. In OL literature, knowledge management is among the kernel qualities of LOs, they systematically store and manage the knowledge acquired via various knowledge search mechanisms (Huber, 1991). The study revealed that data which could have been potentially transformed into other knowledge management hierarchies is stored in the form of minutes and piles in Case-1; but in Case-2 these data are discarded once teachers have got a tick in the monthly checklist. That means, the data produced from peer and expert supervision reports, experience sharing, and teachers' CPD portfolios were not used to enhance further learning but to satisfy the reporting requirements of the school and education authorities in the hierarchy. By the time of the interview with the principal of Case-1, an attempt was made to check if the last ten years' minutes were available. However, he was only able to locate scrambled minutes. The information which is saved from discarding was also rarely shared among teachers to improve instruction since individuals and team of teachers lacked the freedom for interpreting the information and transforming it into meaningful knowledge. This implies the data produced from the aforementioned sources were at best stored in the hands of individuals, which is the most volatile storage site (Wellman, 2009; Nelson and Winter, 1982 in Huber, 1991; Gioia and Poole, 1984). The common and relatively permanent storage sites in LOs such as computers (Argyris and Schon, 1978) were lacking in the school or not properly handled. That means future endeavors for creating a learning school is hampered due to inadequate storage and application of knowledge accumulated over generation of the school community.

There is also a tendency of reform fatigue- which refers to a state of exhaustion, cynicism, and resistance experienced by individuals or organizations due to an excessive number of changes or reforms being implemented in a short period (See Elmore, 1996; Dilkes, Cunningham, and Gray, 2014; Fullan, 2007, Darling-Hammond, 2012). In particular, if there is multiplicity of reforms, it may block genuine learning by school community (Elmore, 1996). The frequent change of reforms especially related to teacher education programs and related reforms in instruction per se might have caused this tendency in Case-2; whereas in Case-1 continuous refreshment trainings organized by the school principal might have helped the communities of Case-1 to stay afresh.

In Case-1, however, the training materials prepared by the school leader/sent from the education hierarchies, selected CPD portfolios, supervision feedback (internal and external), and related materials were stored in the computer or in a memorial centre for later use, and that places Case-1 in a better position in knowledge management per se. This positional difference observed between the two Case schools indicates how failure to knowledge management hinders OL in schools. Of course, the school (Case-2) has computers to store such knowledge for later learning, but because of this OLD related to knowledge management, it was unable to use the available opportunity. Moreover, in Case-2, the opportunities neither from the learning teachers in the school (like the biology teacher) nor from best performing schools around was exploited/explored and shared to others, and such limitations are common in schools where the school leadership is not committed to build a learning school (Senge et al, 2012). This, by and large, hindered workplace learning in Case-2, and it could be taken as another OLD that prevails in the school.

Overall, the analysis of learning post-1994 instructional reforms in the primary schools of Ethiopia reveals a persistent top-down tradition that marginalizes grassroots voices, prioritizes compliance over contextual adaptation, and perpetuates systemic barriers to meaningful organizational learning. While schools like Case-1 demonstrate the transformative potential of servant leadership, structured OL mechanisms, and participatory knowledge management, the broader system remains constrained by prescriptive policies and organizational learning disabilities (e.g., reform fatigue, self-censorship, organizational amnesia, and the Golem effect). The findings underscore that without addressing these entrenched issues—particularly the exclusion of practitioners in reform initiation and the misalignment between post-1994 pedagogy and assessment—even well-intentioned reforms risk becoming superficial exercises. Future efforts must prioritize teacher agency, leadership models that foster double-loop learning, and systemic coherence to bridge the gap between policy aspirations and classroom realities. That may help schools in Ethiopia evolve into a true learning organization, capable of nurturing 21st-century competencies endorsed by the 1994 education and training policy and sustained in the newly endorsed education and training policy too.

CHAPTER SIX

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

6.1 Summary

Schools are places for learning, but this assertion could be proved true only if the schools themselves are learning entities. When this learning is tailored to reforms related to teaching and learning, the likelihood of improving student learning and overall school performance would increase. The purpose of this study was, therefore, to explore the schools' learning of post-1994 instructional reforms by employing the change and organizational learning theories as theoretical lenses. To attain this objective the study framed the following basic research questions: i) What do the reform approach and characteristics of post-1994 instructional reforms look like? ii) To what extent primary schools were built into a learning organization in learning the instructional reforms? How do case schools have learnt the reforms like active learning, continuous assessment, action research, and reflective practice; and iii) What factors did foster/inhibit case schools in the process of learning the instructional reforms?

To answer these questions, the study applied a mixed methods research design (sequential explanatory one); procedurally, first a systematic literature review was conducted to understand how the post-1994 instructional reforms like continuous assessment, active learning, action research, and reflective practice were introduced. Second, quantitative survey was applied to assess the extent of being a learning school by using standard questionnaires developed to measure OL in school context. Third, two case schools (extreme cases) were selected based on the results of the quantitative survey to understand the organizational learning mechanisms applied by the case schools in the course of learning the post-1994 instructional reforms. Finally, the factors that foster or hinder organizational learning in the school context were identified by using the data collected from those case schools.

The study used primary and secondary sources; articles published and working documents produced on the reform approaches- that were followed in the last eight decades of the Ethiopian education- were the secondary sources used to understand the reform tradition. The primary data were collected by using questionnaires from 48 primary schools and interview, and

document review from two case schools functioning in North Shawa zones of the Amhara regional state. The major findings are presented as follow:

Reform tradition

In Ethiopia, despite the heavy criticisms which each regime laid at the regime that preceded it, the reform tradition seemed to continue ineluctably to follow an ‘opaque model’ which is closed to the main stakeholders. The reforms which have been endorsed in the last three regimes, for instance, seem to overlook the voice of grassroots level practitioners, and especially of teachers (minimum diversification of voices). Particular to the regime that introduced the post1994 instructional reforms, TESO and curricular reforms following TESO were managerially driven and characterized by ‘peripheralization of pedagogical practitioners’ which fallen short of changing the reform tradition in the country.

The entrenched top-down reform tradition has led practitioners to develop either resistance or reluctance to initiatives, which later led them to create false clarity or lip service implementation depending upon the levels of coercion enforced by education authorities at the top. Thus, a shift of reform tradition from mere prescriptive approach (supply-driven) to at least a blend of the top-down and bottom-up approach (supply-demand mix) seems essential so as to incorporate the voice of previously voiceless stakeholders and to create a fertile ground for implementation of instructional reforms. Creating space to try out school level reforms could also help grassroots level implementers adapt and localize nationwide education reforms. Moreover, the age-old domination of Western ideas infiltrated through multilateral organizations on reforming the country’s education needs serious attention, and short-term and long-term strategies need to be designed to tailor education to the needs of the country.

The analyses also reveal that preparing the generation for an unknown distant future seems to have been a common aim of reforming education over the last eight decades. But, in this dynamic world when things are uncertain, knowledge and skills acquired today may be obsolete tomorrow. This seems contrary to the 2030 agenda that aims to connect education to sustainable development. That is, unlike the educational reforms I reviewed, the goal of Education for Sustainable Development (SDG) is to transform life through education (UNESCO, 2015). To realize what has been planned in SDG, reformers need to frame the purpose of

education in the country in a manner that maintains a fair balance between what education serves the generation for today and for tomorrow's needs. But, if the traditional 'distant future' continues as a theme, learners may lose the taste for what education is intended to be.

Access, equity, quality, relevance and efficiency have been priorities which the past three regimes had aspired to address, and for which each regime had criticized its predecessor for not addressing the problems linked to these priorities. There is an educative lesson from past regimes that the rhetoric of addressing quintuple priorities simultaneously appears unrealistic. Thus, further prioritizing the priorities needs to be an agendum that future education reforms should critically consider. Moreover, qualified teacher/school leaders, quality curricula, and adequate educational resources were taken as silver bullets for accomplishing the purposes which educational reforms of the past three regimes aspired to achieve. Particularly, recruiting school practitioners (teachers and school leaders) from the top tier of students seems to have been rhetoric common to all the regimes. Nevertheless, winning the war for talent seems an unrealistically hard to achieve plan for sectors like education. If it is to one day be realistic, given the existing school context, it seems difficult for this cohort to work happily. Thus, it sounds convincing to rethink the definition of talent; which in the current organizational learning literature, refers to ability to learn continuously.

Despite the three regimes' apparently contesting ideologies and different contexts, a common thread of change as imposed by diktat and non-recognition, indeed suppression of, grassroots voices impeded the efficacy of their stated desire for change. To break from this tradition, a model, and indeed culture, of learning continuously must be nurtured, inculcated, brought to bear and celebrated. This would help practitioners to effectively learn and further develop reforming ideas in the world of work/schools. It also necessitates that the reform process cultivates and includes the voices of all practitioners, learners and stakeholders, crucially encouraging the freedom to initiate and try-out school-level reforms by grassroots level practitioners. Let the voices, of the previously voiceless, resound!

Magnitude of being a learning organization

The primary and middle schools in the Amhara regional state were struggling to grow into a learning organization, and the progress seems more promising in Level-III schools than in

Level-II schools. This progress, however, is limited in few constructs and characteristics of a learning organization. Revising the schools' standard guideline which is currently in use by the Federal Ministry of Education in line with the constructs and characteristics of a LO could catalyze the progress towards a learning school. In addition to revising the criteria of the school standard currently in use by the Ministry of Education, rethinking the reforming approach from top-down to at least the blended approach appears timely. This could empower schools and teachers to provide context-relevant meaning and to buy-in the structural and program reforms introduced to catalyse implementation and institutionalization of the instructional reform ideas.

Collective learning appears the living learning agency with respect to learning the instructional reforms followed by school-wide learning. Nonetheless, learning by personal agency lacked the qualities possessed by a lifelong learner. This might be due to the fact that the school system overlooked personal growth and learning in professional development programs in favour of collective growth. Thus, since personal learning is the building block for both collective and school-wide learning, learning by personal agency should get fair representation in workplace learning programs and teacher performance appraisals as well. Moreover, the results from regression analysis show that the variability accounted for teacher and school-level variables was not significant (12%) indicating the paramount role of 'beyond teacher' variables likely linked to leadership.

Mechanisms of organizational learning

The qualitative findings complement the quantitative results in that L-III schools were placed in good position in learning those reforms than L-II schools. Continuous professional development, peer and expert supervision, on-job trainings from different sources, department meetings, and forum discussions were government-given organizational learning mechanisms (OLMs) applied to learn the reforms. Whereas communities in C1 had alternative OLMs, the communities in C2 dominantly rely on instructional knowledge acquired during their initial trainings, which might be obsolete. Moreover, most of these OLMs were performed by team and school level; whereas, learning at individual agency was at most tacit or nonexistent for most teachers.

The rigor and quality of OLMs were found better in C1 than in C2 implying that L-III schools are better placed than L-II schools in being a LO. Besides, C2 lacks almost all the characteristics of a LO while it displayed some of the constructs like knowledge acquisition, storage, interpretation, and dissemination.

With regard to the factors fostering or hindering organizational learning, different factors contributed to the learning of the post-1994 instructional reforms in the workplace. Leadership was found on top of other factors in fostering or hindering this learning; that is, in a situation where there is good leadership who creates conducive school environment, the case school showed well the constructs and characteristics of a learning organization. Specifically, it searches for knowledge, stores it, interprets, disseminates and retrieves the instructional knowledge when needed. In this kind of schools, there is also a tradition of sharing vision, team work, opportunity for learning to all staff, culture of inquiry and innovation, and modeling good leadership. Moreover, it was observed that learning communities emerge and sustain in a school environment where the leadership is a servant type. The case school with good leadership was able to display these constructs and characteristics of a LO via the organizational learning mechanisms discussed in the previous sections.

Contrary to this, in schools where there is no good leadership, schools hardly display the constructs of a LO, and particularly the characteristic features of a LO were missing. This leadership difference likely leads the school to a tendency of organizational learning disabilities like the reform fatigue, Golem effect, self-censorship, and organizational amnesia. Besides, in a case school where workplace learning is not prevalent, other factors like inability to balance goals (teacher learning & student learning) and instructional traditions hindered OL. However, factors like overdose in top-down prescriptions, contradiction between reform elements such as contradiction between traditional mode of assessment and constructivist learning and content coverage and co-construction of knowledge hindered OL in both schools though a school with good leadership was able to manage the negative effects of these factors.

6.2 Conclusion

Key findings reveal that in Ethiopia, approaches to education reform—particularly in curriculum and instruction—have remained largely unchanged over the past eighty years. With

few exceptions, policies and curricula have been imposed top-down, systematically marginalizing the voices of grassroots implementers, especially teachers. Successive regimes have not only replicated the same reform traditions but have also mirrored one another in key reform components, including educational objectives, priority areas, implementation strategies, and primary stakeholders. This persistent exclusion of frontline voices has led to reform fatigue, superficial compliance, and repeated failures to achieve meaningful instructional change. On top of these problems, the school community seems challenged to learn those instructional reforms and translate them to classroom practice. When reforms falter, teachers invariably bear the blame—a pattern exemplified by the post-1994 instructional reforms. The prevailing discourse, which reductively attributes failures to implementation issues, underscores this systemic scapegoating. These dynamics continue to undermine current reform efforts under the Ethiopian Education Roadmap. Even with legal frameworks like Proclamation No. 1183/2020 requiring participatory policymaking, the voices of teachers and the broader school community seem excluded from substantive roles in shaping curricular and instructional changes.

By knowledge acquisition, this study refers to the school's ability to actively seek, generate, and internalize new instructional knowledge, while organizational memory refers to the extent to which such knowledge is retained, institutionalized, and reused through routines, shared practices, and documented systems (Huber, 1991). Although the mean scores for both school types fall within the moderate range, the relatively lower scores in knowledge acquisition (3.42 for already functioning schools and 3.17 for beginner schools) and organizational memory (3.56 vs. 3.25) indicate that schools are not strongly engaging in proactive learning activities such as experimentation, inquiry, reflection, and systematic documentation of instructional reforms. This pattern suggests that instructional reforms introduced after 1994 are largely received and implemented in a compliance-oriented, top-down manner rather than being deeply internalized and embedded into school practices. From a learning organization perspective, deep organizational learning would be reflected in stronger performance in knowledge acquisition and memory, as these dimensions signal sustained learning beyond initial adoption. The observed weaknesses therefore imply that learning remains surface-level and episodic, rather than continuous and institutionalized. The action dimension revealed similar patterns, with already functioning schools (3.57) showing stronger performance than beginner schools (3.32). While schools exhibited relative strengths in shared vision development and team learning, they

struggled significantly with inherent features of a LO like establishing cultures of inquiry (mean scores as low as 2.77-2.97 for personal agency) and external knowledge engagement. Thus, at the individual level, teacher learning remains largely tacit or absent, indicating that reforms are often institutionalized without deep personal engagement.

Most strikingly, the school-level variables explained only 12.1% of the variance in learning magnitude, indicating that factors beyond school level variables like policy rigidity, reform contradictions, and hierarchical structures played more substantial roles in determining the variation in the magnitude of learning those reforms. The limited explanatory power of school-level variables aligns with existing literature showing that when reforms are imposed without meaningful participation of actors in the grassroots level, school-level variables become poor indicators of reform success. This suggests that the power dynamics in the prescriptive hierarchy likely play a more substantial role in determining how schools learn and internalize prescribed reforms than traditional institutional or demographic characteristics.

Moreover, the current top-down reform approach has failed to cultivate the essential characteristics of learning organizations across all school categories. The notably low scores in personal agency—especially in knowledge acquisition—indicate that unless these systemic gaps are addressed, even well-designed reforms may only achieve surface-level compliance rather than driving meaningful, transformative change in the education practice of the country.

The effectiveness of Organizational Learning Mechanisms (OLMs) in supporting post-1994 instructional reforms vary significantly across workplaces, largely due to differences in leadership quality and structured learning systems. Schools with strong leadership and robust OLMs—such as ongoing professional development, peer collaboration, and reflective forums—demonstrate better knowledge management, shared vision, and team learning, aligning with key traits of a LO. Servant leadership, in particular, fosters a culture of inquiry, innovation, and collective accountability, helping schools reconcile reform-related contradictions. Conversely, schools with weak leadership rely on superficial OLMs and exhibit organizational learning deficits, including reform fatigue, self-censorship, organizational amnesia, and the Golem effect

6.3 Recommendations

Based on the study's findings and conclusions, the following recommendations are proposed for policymakers, school leaders, and education stakeholders to enhance the effectiveness of instructional reforms and foster a culture of continuous school-based learning.

To address the historical shortcomings of Ethiopia's education reform efforts, particularly in instructional improvement, a fundamental shift from prescriptive to participatory reform processes is needed. The consistent pattern of top-down imposition has demonstrably contributed to the repeated failure of reforms, underscoring the necessity for the Ministry of Education and Regional Education Bureaus to institutionalize practitioner involvement in the reform process. This requires establishing structured mechanisms that elevate teacher voices through formal representation in policy committees, systematic collection of classroom feedback, and meaningful incorporation of school-based research findings into decision-making. Crucially, the valuable insights currently generated through OLMs like textbook evaluations, supervision feedback, and action research must be properly documented, analyzed, and translated into policy adjustments rather than serving as nominal exercises conducted for reporting purpose alone. This paradigm shift would not only improve implementation fidelity but also harness the experiential knowledge of practitioners as a vital resource for educational improvement.

There is a striking contrast between the two principals in this study - where the first-degree holder (Case 1) outperformed the more qualified but authoritarian master's degree holder (Case 2) - provides crucial lessons for reforming principal selection and recruitment. Regional education bureaus should prioritize leadership character over academic credentials when selecting school leaders, specifically seeking candidates who demonstrate the devotion and commitment shown by Case 1's principal. While maintaining minimum qualification standards, deployment decisions should favor those who are committed to serve others, over those with higher qualifications but top-down tendencies. This shift would increase the number of schools that properly learn reforms rather than just implement them superficially. The education bureau should also endorse functional systems to reward and pressure school leaders based on accomplishments in reform implementation.

Since the weight given to the actual instructional process is minimum (Tadesse et al, 2022), the current school categorization system (Levels I-IV) based on input-process-output

measures, demonstrates partial alignment with learning organization principles, particularly in the process component. Findings indicate that Level-III schools show greater potential for developing as learning organizations. This suggests the existing framework already contains foundational elements for fostering organizational learning in schools. However, to systematically cultivate this transformation, the Ministry of education should revise the school standard guideline (MoE, 2014) to explicitly prioritize and strengthen learning organization characteristics. The revised standards among others should: (1) elevate the weighting of collaborative learning practices, (2) incorporate specific indicators for knowledge management systems, and (3) reward evidence of organizational learning. The demonstrated success of Level-III schools in operationalizing these elements confirms the viability of such an adjustment.

The current requirement of 60 annual professional development hours for teachers suffers from implementation fragmentation across multiple uncoordinated platforms (CPD, forums, supervision, action research, score analysis, workshops, etc). While each mechanism holds value, their scattered delivery dilutes effectiveness. The Ministry of Education in collaboration with the regional education bureaus should: (1) systematically integrate these organizational learning mechanisms into a coherent professional growth framework, (2) establish clear performance metrics linking teacher engagement to measurable student learning outcomes, and (3) implement a balanced accountability system that rewards schools demonstrating successful implementation while providing targeted support for underperforming teachers. This restructuring would transform the current checklist compliance approach into a meaningful learning continuum.

A fundamental misalignment exists between Ethiopia's post-1994 instructional reforms promoting 21st century skills (critical thinking, creativity, problem-solving) and the persisting traditional assessment system dominated by memory-based paper examinations. This contradiction is exacerbated by the SIP's narrow equating of learning achievement with test scores, which inevitably shapes teaching practices through assessment backwash. Teachers are effectively compelled to prioritize score performance of students over implementing constructivist pedagogies, undermining reform objectives. To resolve this systemic inconsistency, the Ministry of Education and the regional bureaus need to: (1) redesign regional/national examinations to authentically assess higher-order thinking skills, (2) develop complementary classroom assessment tools aligned with reform pedagogies, and (3) reconfigure school

performance metrics to value competency demonstration beyond test scores. Such alignment is essential for realizing the sustained aspirations of both historical and current reforms like the Education Transformation Program (MoE, 2023).

Moreover, to break the cycle of organizational learning disabilities identified in this study, a multi-pronged systemic intervention is required. First, the Ministry of Education should implement a nationwide program to combat the entrenched Golem effect, combining evidence-based teacher training on growth mindset with public showcases of schools that achieve exceptional results by maintaining high expectations. Second, knowledge management systems must be institutionalized through mandatory memorial centers in all schools and standardized digital repositories for preserving pedagogical knowledge, with particular attention to capturing insights from transferring or retiring staff. Concomitantly, during transfer and retirement, the MoE should introduce a system that sanctions auditing knowledge as an organizational property like that of the physical resources. Third, regional education bureaus need to establish psychological safety mechanisms like anonymous feedback channels and reformed staff meeting protocols to reduce self-censorship. Finally, to address reform fatigue, future initiatives should incorporate learning periods where schools pilot reforms before full implementation, with adjustments based on practitioner feedback. These interventions should be reinforced by modifying accountability frameworks to value knowledge preservation and professional dialogue as highly as physical resource management. Only through such comprehensive measures can the education system overcome its chronic learning disabilities and create sustainable improvement.

For schools to effectively develop student competencies, they must first transform into vibrant learning organizations themselves. While the Ministry's recent shift toward lesson study in CPD is commendable, this must be reinforced by systemic support for school-based professional learning communities. School principals should collaborate with woreda education bureaus to create structured opportunities for teacher collaboration, peer observation, and reflective dialogue as part of daily practice. The Ministry should further strengthen this ecosystem by: (1) establishing formal coaching/mentoring partnerships between schools and teacher education institutions, (2) developing online professional development platforms to supplement in-person learning, and (3) providing resources for schools to document and share

best practices. These interconnected strategies would create a lifelong learning culture where teachers' professional growth directly enhances student learning.

The organizational learning findings, particularly from Case 1, challenge conventional teacher recruitment paradigms. Rather than engaging in unattainable talent wars to attract top-tier graduates to the teaching profession- an approach rooted in entity theory assumptions about fixed teaching ability - the education system should prioritize candidates' learning motivation and growth mindset (incremental theory). This shift would: (1) expand the qualified applicant pool by valuing developmental potential over entry-level achievement scores, (2) align with evidence that workplace learning (especially in collegial environments like Case-1 matters more than initial training for teacher effectiveness, and (3) create sustainable professional growth systems where schools become true learning organizations. The Ministry should accordingly redesign the teacher selection and recruitment criteria to assess candidates' demonstrated curiosity, receptiveness to feedback, and collaborative dispositions - traits that predict long-term development in large teaching forces. This approach would prove particularly strategic for Ethiopia's context, where scaling quality education requires maximizing the potential of all teachers through continuous workplace learning rather than relying on an unattainable minority of top talent.

The study reveals a critical implementation gap: while organizational learning predominantly occurs at team and school-wide levels, actual reform enactment happens individually in classrooms. To bridge this disconnection, a multi-tiered approach is needed. The Ministry should strengthen licensing/relicensing programs to mandate evidence of personal learning growth through, for example, classroom implementation portfolios, reflective practice journals, and peer-reviewed lesson studies. Simultaneously, regional and woreda education offices must collaborate with school leaders to provide basic infrastructure (reliable internet, digital devices, and quiet learning spaces) enabling teachers' self-directed online professional development. These combined measures would create an ecosystem where personal agency becomes the driver rather than the weak link in learning those instructional reforms.

This study also reveals how funding agencies have persistently shaped Ethiopia's educational reforms, using financial leverage to prescribe instructional approaches that often misalign with local contexts. While external funding remains necessary for educational

development, policymakers must reassert national ownership of reform processes by: (1) establishing multi-stakeholder reform councils that elevate practitioner, student, and community voices in decision-making; (2) developing stringent contextual relevance frameworks for all externally-funded programs; and (3) aligning curriculum development with Ethiopia's specific economic transformation pathways rather than donor priorities. The Ministry should particularly strengthen its technical capacity to critically evaluate and adapt foreign-sponsored reform proposals, ensuring they undergo rigorous localization processes before implementation. This balanced approach would maintain access to essential funding while preventing the historical pattern of relevance-compromised reforms, ultimately serving Ethiopia's long-term development needs rather than external agendas.

Finally, this study proposes three contesting hypotheses that challenge conventional wisdom in educational reform: (1) Leadership determines the success or failure of reforms, especially in prescribed reform tradition contradicting to the dominant teacher-centric paradigm; (2) Teachers teach not necessarily as they were taught (or unlikely to inherit pedagogy), but as they are expected to assess; and (3) Teacher recruitment should prioritize learning ability over entry achievement. Nevertheless, these propositions warrant rigorous empirical validation through longitudinal studies comparing leadership-focused versus teacher-focused improvement models, pedagogical analysis across varied assessment systems, and tracking of differentially recruited teachers' career trajectories. The emergent concept of organizational learning disabilities (Golem effect, institutional amnesia, reform fatigue, and self-censorship) identified in this study merits particular attention as a novel framework for diagnosing chronic reform implementation barriers. Future research should operationalize this construct through systematic taxonomy development and cross-cultural validation studies. Additionally, the field requires refined organizational learning measurement tools - current holistic questionnaires need adaptation to reform-specific learning contexts.

In sum, Ethiopia's education system stands at a crossroads: it can either perpetuate the cycle of top-down, poorly internalized reforms or embrace a transformative approach that empowers schools as learning organizations. By adopting these recommendations, policymakers and practitioners can bridge the gap between reform intentions and classroom realities, ultimately improving student learning outcomes.

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Appendix-1

List of schools by Zones and Woredas

Zone	Woreda	School
1. North Shawa	1. Ankober	1. Balamberas yilma wey
		2. Mehalwonz
	2. Basonaworena	3. Debele
		4. Woshawushign
	3. Debre Birhan	5. Baso
		6. Model2
	4. Ensaro	7. Deneba
		8. LijSiyounGhiwot
	5. Menzgera	9. Edget
		10. Mehalmeda
		11. Tsehay Sina
	6. Mojanawodera	12. Alemtena
		13. Tarmaber
	7. Moretnajiru	14. Enewari
		15. Mangudo
	8. Tarmaber	16. Abiye
		17. Armanya
East Gojjam	9. Basoliben	18. Michig
		19. Yejube
	10. D/T/Gin	20. Asenemariam
		21. Geremis
		22. Muga
	11. DebayTGin	23. Kuy
	12. Debrelias	24. Dejba
		25. Tigilfire
	13. Debremarkos	26. Abima
	14. Enemay	27. Gotera
		28. Hailuyosedek
		29. Wdajekebede
		30. Yetmen
	15. Machakel	31. AmanuelN1
		32. Embuli
		33. Yewula
South Gondar	16. Andabet	34. Atsedemariam
		35. Shime
	17. D/Tabor	36. Atsetewodros
	18. Dera	37. Addisalem

		38. Anbesame
		39. Genetemariam
		40. Shimemaria
		41. Tebabari
		42. Mekaneyesus
		43. Shenbekoch
		44. Shilekt
		45. Tejbara
		46. Zigora
	19. Este	
	20. Farta	47. Fasilminch

Appendix-2a
Questionnaires for Teachers

Addis Ababa University
College of Education and Language Studies
Department of Curriculum and Comparative Education
Teacher SLO Questionnaire (Original English Version)

Dear Respondent!

I am a Doctoral Candidate in Addis Ababa University, Department of Curriculum and Instruction; thus, this questionnaire is designed to gather data for the research work I am supposed to submit as a requirement for PhD in curriculum studies.

The study is based on field data collected from multi-method instruments designed to gather data from different research participants, and this questionnaire is one of these instruments. The questionnaire has two parts: part one requests you to provide background data and part two asks you to rate the level to which the stated actions and thoughts are practiced/reflected in your school.

Although it is an academic exercise, the research may contribute to improve policy and practice. But, the reliability, validity and objectivity of the findings and the entire research work depends on the data you provide me. Thus; if you are willing enough to provide the data, I kindly request you to provide genuine data that can truly describe the situation in your school.

I would like to assure in advance that all the information you provide will be kept confidential in the entire research process.

Thank you in Advance!

A) General Information

- 1) School name: _____
- 2) Year established: _____
- 3) Zone where school is located: _____
- 4) Woreda: _____
- 5) School standard level in 2014 EC:
[1] Level 1 [2] Level 2 [3] Level 3 [4] Level 4
- 6) Number of teachers in the school:
Male: ____ Female: ____
- 7) Your gender: [1] Male [2] Female
- 8) Your professional career level:
[1] Beginner teacher
[2] Intermediate teacher
[3] Teacher
[4] Senior teacher
[5] Lead teacher
- 9) Your teaching experience:
[1] <5 years
[2] 5-10 years
[3] 11-15 years
[4] >15 years
- 10) Your current qualification:
[1] 10+1/12+1
[2] 10+3/12+2
[3] First degree
[4] Other: _____
- 11) Subject(s) you teach: _____
- 12) Grade levels you teach:
[1] Grades 1-4
[2] Grades 5-8
[3] Grades 1-8

[4] Other (specify): _____

13) In your assessment, how would you rate the implementation of continuous professional development programs in your school?

[1] Very low

[2] Low

[3] Medium

[4] High

[5] Very high

Part-Two: Items measuring Organizational Learning in School Context

The items in the table below are adapted to measure thinking and actions in your school with respect to organizational learning. The questionnaire contains a total of 52 items (19 items for measuring the thinking dimension and 33 for action dimension) and it will take less than an hour. Each of the items has five alternatives that ranges between ‘Strongly Disagree’ and Strongly Agree. Please read each item carefully and rate each action/thinking in the following way

a	If your response is “Strongly disagree”, put a tick mark (√)	1
b	If your response is “Disagree”, put a tick mark (√)	2
c	If your response is “Not yet decided”, put a tick mark (√)	3
d	If your response is “Agree”, put a tick mark (√)	4
e	If your response is “Strongly Agreed”, put a tick mark (√)	5

S.No. ³⁴	Items measuring the THINKING DIMENSION of an LO	1	2	3	4	5
1. [A]	The school encourages teachers to be part of formal and informal networks from outside the school					
2. [A]	New ideas and approaches of the way of doing things are experimented.					
3. [A]	As a result of the experience acquired, teachers are more efficient in exercising their responsibilities.					
4. [D]	There is some time devoted to discussions about the school's future needs.					
5. [A]	Teachers are informed of how the school was created, its mission and philosophy of work					
6. [A]	There is consolidated research and/or development policy at the level of the school					
7. [D]	Regular meetings are held between departments to integrate the existing information.					
8. [D]	Vital information is transmitted quickly to all teachers.					
9. [D]	There are people responsible for collecting the proposals made by the school's teachers, to reunite and distribute them internally.					
10. [A]	School systems and procedures support innovation					
11. [I]	Obtaining an interpretation as uniform as possible of the information which has significance for the school is attempted					
12. [I]	All the teachers share and are committed to the mission of the school.					
13. [A]	Information about possible changes in the environment in which we operate is collected.					
14. [A]	It is to be learned from other schools to be able to respond to problems before they arise.					
15. [M]	The school has databases to store information, knowledge, experiences so as to be able to use them later on					
16. [M]	Databases are constantly updated.					
17. [M]	Teachers have access to the school's databases, depending on the specific needs of their activity.					
18. [M]	Once the teachers know who they have to contact in the school, when an opportunity or problem arises, it is possible to have access to that person in a convenient way.					
19. [M]	Teachers are aware of who are the people with the specific abilities and experience to intervene when an opportunity or problem arises					

³⁴ Knowledge Acquisition (A), Memory (M), Interpretation (I), and Dissemination (D)

	Items measuring ACTION DIMENSIONS of an LO	5	4	3	2	1
1	Learning and teaching are oriented towards realizing the vision					
2	Vision is the outcome of a process involving all staff					
3	Students, parents, the external community and other partners are invited to contribute to the school's vision					
4	All staff engage in continuous professional learning					
5	Professional learning is focused on student learning and school goals					
6	Staff are fully engaged in identifying the aims and priorities for their own professional learning					
7	Professional learning is based on assessment and feedback					
8	Time and other resources are provided to support professional learning					
9	The school's culture promotes and supports professional learning					
10	Staff learn how to work together as a team					
11	Collaborative working and collective learning are focused and enhance learning experiences and outcomes of students and/or staff practice					
12	Staff feel comfortable turning to each other for consultation and advice					
13	Staff reflect together on how to make their own learning more powerful					
14	The school supports and recognizes staff for taking initiative and risks					
15	Staff engage in forms of inquiry to investigate and extend their practice					
16	Inquiry is used to establish and maintain a rhythm of learning, change and innovation					
17	Staff have open minds towards doing things differently					
18	Students are actively engaged in inquiry					
19	Systems are in place to examine progress and gaps between current and expected impact					
20	Sources of research evidence are readily available and easily accessed					
21	Structures for regular dialogue and knowledge exchange are in place					
22	Staff have the capacity to analyse and use multiple sources of data for feedback, including through ICT, to inform teaching and allocate resources					
23	The school development plan is evidence-informed, based on learning from self-assessment, and updated regularly					
24	The school evaluates the impact of professional learning					
25	The school scans its external environment to respond quickly to challenges and opportunities					
26	Staff collaborate, learn and exchange knowledge with peers in other schools through networks and/or school-to-school collaborations					
27	The school partners with higher education institutions, businesses, and/or public or non-governmental organizations in efforts to deepen and extend learning					
28	ICT is widely used to facilitate communication, knowledge exchange and collaboration with the external environment					
29	School leaders model learning leadership, distribute leadership and help grow other leaders, including students					
30	School leaders develop the culture, structures and conditions to facilitate professional dialogue, collaboration and knowledge exchange					
31	School leaders ensure that the organization's actions are consistent with its vision, goals and values					
32	School leaders promote and participate in strong collaboration with other schools, parents, the community, higher education institutions and other partners					
33	School leaders ensure an integrated approach to responding to students' learning and other needs					

Appendix-2b

Translated English Version SLO Questionnaire

Table one-Thinking perspective

S. No.	Sentence	5	4	3	2	1
1.[A]	The school encourages teachers to be part of formal and informal networks outside the school.					
2.[A]	There are attempts to implement new ideas					
3.[A]	Based on experiences they get; teachers implement responsibilities effectively.					
4.[A]	There is time set for discussions on future needs of the school.					
5.[A]	Teachers are told how the school was established, its mission and its motto.					
6.[A]	There is a well-established action research practice in the school.					
7.[D]	There are interdepartmental ordinary meetings to share experiences obtained through trainings and collaborative/ collegial learning.					
8.[D]	Information helpful for the teaching and learning are dispatched promptly for teachers in the school.					
9.[D]	There are teachers assigned to collect and redistribute ideas forwarded in collegial learning processes in the school.					
10.[A]	The school system and procedures support creativity.					
11.[I]	Attempt was made to make information necessary for the school to have a common meaning.					
12.[I]	Sharing information necessary for the teaching and learning, all teachers work collaboratively to meet the mission of the school.					
13.[A]	Information is gathered about system changes to be implemented in the school environment (inside and outside the compound).					
14.[A]	The school shares experience from other schools on ways of reacting to problems to occur before hand.					
15.[M]	The school has database to store and reuse information, knowledge and experience.					
16.[M]	The database used to store information is updated consistently.					
17.[M]	The database in the school is easily accessible by the teachers.					
18.[M]	Teachers can find a knowledgeable teacher to respond to their questions whenever they encounter quires about teaching and learning.					
19.[M]	Teachers know especially talented and experienced teachers who can use opportunities and know how to tackle problems when opportunities or problems occur.					

Table Two-Action perspective

S. No.	Sentence	5	4	3	2	1
1.[V]	The teaching and learning held in the school are geared towards materializing school vision.					
2.[V]	Vision of the school is a result of the entire school community participation.					
3.[V]	Students, parents, the community and other stake holders were invited to contribute for the vision of the school.					
4.[CPL]	In the school, all teachers participate in CPD.					
5.[CPL]	Student learning and school goals are focuses of professional development in the school.					
6.[CPL]	Teachers are engaged entirely by identifying their priorities and personal professional development goals.					
7.[CPL]	In the school, professional development is based on assessment/evaluation and comments.					
8.[CPL]	Time and other inputs are assigned to support teachers' professional development.					
9.[CPL]	Culture of the school encourages and supports professional development.					
10.[TL]	Teachers learn from each other how to work collaboratively in teams.					
11.[TL]	Team and collaborative learning based on face to face and ICT can improve student and/or teacher training and teaching experiences and products. The Amharic version is not clear!!!					
12.[TL]	School teachers are comfortable with the consultations and support they give each other about teaching and learning.					
13.[TL]	Teachers rethink and share ideas on how to be more successful in what they teach.					
14.[IE]	The school supports teachers who employ new practices; has positive attitude towards mistakes in the new practices and acknowledges good results.					
15.[IE]	Teachers have developed inquiry culture to assess their experiences and share better experiences.					
16.[IE]	Inquiry culture in the school is employed to establish and sustain teaching, change and creative styles.					
17.[IE]	Teachers in the school attempt continuously to implement things in different ways.					
18.[IE]	There is a fertile ground for students in the school to be inquisitive.					
19.[CEK]	A system is developed to evaluate the process and gaps between current and expected practice in the school.					
20.[CEK]	Research works done by school teachers and documents can easily be accessed.					

21.[CEK]	Structures are established for ordinary discussions and knowledge sharing in the school.					
22.[CEK]	Teachers have the capability to analyze and use database helpful for their teaching.					
23.[CEK]	Development plan of the school is based on evidence, improvement through self-evaluation and that updates itself through time.					
24.[LE]	The school evaluates positive effects of CPD every time.					
25.[LE]	The school evaluates external environments to give timely response to challenges and opportunities.					
26.[LE]	Teachers of the school work collaboratively with other school teachers, learn from each other and share knowledge.					
27.[LE]	The school works in collaboration with higher education institutes, prosperous individuals or government/ non-government organizations to support teacher collaborative learning and sustainability.					
28.[LE]	ICT is widely used to link the school with outside school environment and facilitate knowledge exchange and collaboration.					
29.[LL]	School leaders model learning leadership, share leadership and bring up students and other leaders.					
30.[LL]	Leaders of the school make structural attempts to improve professional discussions, collaboration and knowledge exchange among teachers.					
31.[LL]	Leaders of the school verify that school practices are in accordance with the vision, goals and values of the school.					
32.[LL]	School leaders have established strong collaboration with other schools, parents, the community, higher education institutes and other stake holders.					
33.[LL]	School leaders perform coordinated jobs to respond to student education and other needs.					

Thank you very much for your precious time!

SLO Questionnaire Amharic Version

አዲስ አበባ ዩኒቨርሲቲ

የትምህርት እና ስነ-ባህሪ ኮሌጅ

የስርዓተ-ትምህርት ትምህርት ክፍል

በመምህራን የሚሞላ የጽሁፍ መጠይቅ

ውድ ተሳታፊ!

እኔ የዚህ መጠይቅ አዘጋጅ በአዲስ አበባ ዩኒቨርሲቲ የ3ኛ ዲግሪ ተማሪ ነኝ። የመጠይቁ ዋና ዓላማም ት/ቤቶች እንደሚማሩ ተቋማት (Learning Organization) ያሉበትን ደረጃ መፈተሽ ነው። እርስዎ የሚስጡት መረጃ ለዚሁ ተግባር ብቻ የሚውል መሆኑን አስቀድሜ እያረጋገጥሁ እያንዳንዱን ጥያቄ በጥሞና በማንበብ ምላሽ እንዲሰጡ በትህትና እጠይቅዎታለሁ።

ከምስጋና ጋር!

ሀ) ዳራዊ መረጃ

1) የት/ቤቱ ስም _____ 2) የተመሰረተበት ዓመት _____

3) ት/ቤቱ የሚገኝበት ዞን _____ 4) ወረዳ _____

5) በ2014 ዓ.ም የት/ቤቱ ደረጃ ምድብ [school standard]

1) ደረጃ አንድ 2) ደረጃ ሁለት 3) ደረጃ ሶስት 4) ደረጃ አራት

6) በት/ቤቱ የሚያስተምሩ የመምህራን ብዛት 1) ወንድ 2) ሴት

7) የዕርስዎ ጾታ 1) ወንድ 2) ሴት

8) የደረሱበት ሙያ ደረጃ

1) ጀማሪ መምህር 2) መለስተኛ 3) መምህር 4) ከፍተኛ 5) መሪ መምህር

9) በመምህርነት ያለዎት አገልግሎት

1) <5 ዓመት 2) ከ5 እስከ10 ዓመት 3) 11እስከ15 ዓመት 4) >15 ዓመት

10) አሁን የያዙት የት/ደረጃ

1) 10+1/12+1 2) 10+3/12+2 3) የመጀመሪያ ዲግሪ 4) ሌላ _____

11) የሚያስተምሩት/ሯቸው የትምህርት ዓይነት/አይነቶች _____

12) የሚያስተምሩበት የትምህርት ዕርከን

1) ከ1ኛ እስከ 4ኛ 2) ከ5ኛ እስከ 8ኛ 3) ከ1ኛ እስከ 8ኛ 4) ሌላ ካለ ይገለጽ

13) በዕርስዎ ግምገማ በት/ቤቱ የተከታታይ ሙያ ማሻሻያ ፕሮግራም አፈጻጸም ምን ይመስላል?

1) በጣም ዝቅተኛ ነው 3) መካከለኛ ነው 5) በጣም ከፍተኛ ነው

2) ዝቅተኛ ነው 4) ከፍተኛ ነው

ለ) ዝርዝር ዝግ ጥያቄዎች

ከዚህ በታች በሰንጠረዥ አንድ ስር የቀረቡ ጥያቄዎች ለእያንዳንዳቸው አምስት አምስት አማራጮች ተቀምጠውላቸዋል። ትርጓሜያቸውም [1] ፈጽሞ አልስማማም፣ [2] አልስማማም፣ [3] ምላሽ ለመስጠት እችላለሁ፣ [4] እስማማለሁ እና [5] በጣም እስማማለሁ ማለት ነው። እያንዳንዱን ጥያቄ እርስዎ በሚሰሩበት ት/ቤት ካለው አተገባበር አንጻር መዝነው ምላሽ ይስጡ እባክዎት።

ሰንጠረዥ አንድ

ተ.ቁ	ዓረፍተ-ነገሮች	5	4	3	2	1
1. [A]	መምህራን ከት/ቤቱ ውጭ ያሉ መደበኛ እና መደበኛ ያልሆኑ አውታረ-መረቦች ለምሳሌ የንባብ ቡድን (Networks like study group) አካል እንዲሆኑ ት/ቤቱ ያበረታታል።					
2. [A]	በት/ቤቱ አዳዲስ ሀሳቦች እና አሰራር ዘዴዎች ይሞከራሉ።					
3. [A]	የት/ቤቱ መምህራን ከክላስተር ት/ቤቶች ጋር በሚያደርጉት ልምድ ልውውጥ ባገኙት ልምድ ኃላፊነታቸውን በብቃት በመወጣት ላይ ናቸው።					
4. [D]	ስለ ትምህርት ቤቱ የወደፊት ፍላጎቶች ለመወያየት የተመደበ ጊዜ አለ።					
5. [A]	መምህራን ትምህርት ቤቱ እንዴት እንደተፈጠረ፣ ተልዕኮው እና የስራ ፍልስፍናው ምን እንደሆነ ይነገራቸዋል።					
6. [A]	በትምህርት ቤቱ ደረጃ የተጠናከረ የተግባራዊ ምርምር ተሞክሮ አለ።					
7. [D]	በስልጠና እና እርስበርስ በመማማር ሂደት የተገኙ መረጃዎችን ለማዋሃድ በትምህርት ክፍሎች መካከል መደበኛ ስብሰባዎች ይካሄዳሉ።					
8. [D]	በት/ቤቱ ለመማር ማስተማር ስራ ጠቃሚ የሆኑ መረጃዎች ለሁሉም መምህራን በፍጥነት ይተላለፋሉ።					
9. [D]	በት/ቤቱ የዕርስበርስ መማማር ሂደት የቀረቡት ሀሳቦችን አሰባስቦ እንደገና ለማሰራጨት ሃላፊነት የተሰጣቸው መምህራን አሉ።					
10.[A]	የትምህርት ቤቱ አሰራርና (system) የአሰራር ሂደቶች (procedures) ፈጠራን ይደግፋሉ					
11.[I]	ለት/ቤቱ ጠቀሜታ ያለውን መረጃ በተቻለ መጠን ወጥ የሆነ ትርጉም እንዲኖረው ለማድረግ ተሞክሯል።					
12.[I]	ሁሉም መምህራን ለመማር-ማስተማር ስራ ጠቃሚ የሆኑ መረጃዎችን እርስበርስ በመጋራት የት/ቤቱ ተልዕኮ ለማሳካት በትጋት ይሰራሉ።					
13.[A]	በት/ቤቱ ከባቢ [ምድረግቢ እና ውጭ]ሊደረጉ ስለሚችሉ የአሰራር ለውጦች መረጃ ይሰበስባል።					
14.[A]	ችግሮች ከመከሰታቸው በፊት ምላሽ መስጠት እንዲቻል ት/ቤቱ ከሌሎች ት/ቤቶች ትምህርት ይወስዳል ።					
15.[M]	ትምህርት ቤቱ መረጃን፣ እውቀትን፣ እና ልምድን ለማከማቸት እና መልሶ ለመጠቀም የሚያስችል የመረጃ ቋት (database) አለው።					

16.[M]	በት/ቤቱ መረጃን ለማጠራቀም የሚውሉ ቋቶች (databases) ያለማቋረጥ ይዘምናሉ።					
17.[M]	በት/ቤቱ ያሉ የመረጃ ቋቶች (databases) ለመምህራን በቀላሉ ተደራሽ ናቸው።					
18.[M]	መማርማስተማርን የተመለከቱ ጥያቄዎች ካጋጠማቸው የት/ቤቱ መምህራን ጥያቄያቸውን ለመመለስ የሚችል እውቀት ያለው መምህር በት/ቤቱ ማግኘት ይችላሉ።					
19.[M]	መምህራን እድል ወይም ችግር ሲፈጠር እድሉን ለመጠቀም ወይም ችግሩን ለመፍታት ልዩ ችሎታ እና ልምድ ያላቸው መምህራን እነማን እንደሆኑ ያውቃሉ					

ከዚህ በታች ሰንጠረዥ ሁለት ስር የቀረቡ ጥያቄዎች ለእያንዳንዳቸው አምስት አምስት አማራጮች ተቀምጠውላቸዋል። ትርጓሜያቸውም [1] ፈጽሞ አልስማማም፣ [2] አልስማማም፣ [3]ምላሽ ለመስጠት እችላለሁ፣ [4] እስማማለሁ እና [5] በጣም እስማማለሁ ማለት ነው። እያንዳንዱን ጥያቄ እርስዎ በሚሰሩበት ት/ቤት ካለው አተገባበር አንጻር መዝነው ምላሽ ይስጡ እባክዎት።

ሰንጠረዥ ሁለት

ተ፡ቁ	ዓረፍተ ነገሮች	1	2	3	4	5
1. [V]	በት/ቤቱ መማር እና ማስተማር የት/ቤቱን ራዕይ እውን ማድረግ ላይ ያተኮሩ ናቸው።					
2. [V]	የት/ቤቱ ራዕይ ሁሉንም የት/ቤቱ ማህበረሰብ ያሳተፈ ሂደት ውጤት ነው።					
3. [V]	ተማሪዎች፣ ወላጆች፣ የውጭው ማህበረሰብ እና ሌሎች አጋሮች ለት/ቤቱ ራዕይ አስተዋፅዖ እንዲያደርጉ ተጋብዘዋል					
4. [CPL]	በት/ቤቱ ሁሉም መምህራን ቀጣይነት ያለው ሙያዊ ልማት (CPD) ላይ ይሳተፋሉ					
5. [CPL]	በት/ቤቱ ሙያዊ ልማት በተማሪዎች መማር ላይ እና በትምህርት ቤት ግቦች ላይ ያተኮረ ነው።					
6. [CPL]	መምህራን ለራሳቸው ሙያዊ ልማት አላማዎችን እና ቅድሚያ የሚሰጣቸውን ነገሮች በመለየት ሙሉ በሙሉ ተሰማርተዋል።					
7. [CPL]	በት/ቤቱ የመምህራን ሙያዊ ልማት (professional development) መረጃ በመሰብሰብ፣ በመተንተን እና ተገቢ ግብረመልስ በመስጠት ላይ የተመሰረተ ነው።					
8. [CPL]	የት/ቤቱን መምህራን ሙያዊ ልማት ለመደገፍ ጊዜ እና ሌሎች ግብዓቶች ተመድበዋል።					
9. [CPL]	የትምህርት ቤቱ ባህል (school culture) ሙያዊ ልማትን ያበረታታል፤ ይደግፋል።					
10. [TL]	መምህራን በቡድን ሆነው እንዴት አብረው መስራት እንደሚችሉ ዕርስበርስ ይማማራሉ።					
11. [TL]	በት/ቤቱ በፊትለፊት ወይም በአይሲቲ ተደግፈው መምህራን የሚተገብሯቸው በትብብር/በጋራ የመማር ተግባራት የመምህራንን የመማር ልምዶችን እና የተማሪዎችን ውጤት የሚያሳድጉ ናቸው።					
12. [TL]	የት/ቤቱ መምህራን መማር ማስተማሩን በሚመለከት እርስበርስ መመካከርና መደጋገፍ ምችት ይሰጣቸዋል።					
13. [TL]	መምህራን በሚያስተምሩት ትምህርት እንዴት የበለጠ ውጤታማ መሆን እንደሚችሉ በጋራ ያሰላስላሉ፤ ሃሳብም ይለዋወጣሉ።					
14. [IE]	ት/ቤቱ አዳዲስ አሰራር ለሚሞክሩ መምህራን ድጋፍ ያደርጋል፤ በሙከራ ሂደት የሚፈጠሩ ስህተቶችን በባለ ይመለከታል፤ ለተገኘ መልካም ውጤትም እውቅና ይሰጣል።					
15. [IE]	መምህራን ልምዳቸውን ለመመርመር እና ምርጥ ተሞክሮን ለማስፋት የመጣደቅ (inquiry) ባህል አጎልብተዋል።					
16. [IE]	በት/ቤቱ የመጣደቅ ባህል (inquiry) የመማር፣ የለውጥ እና የፈጠራ ዘዴን ለመመስረት እና ለማቆየት ስራ ላይ ይውላሉ።					
17. [IE]	የት/ቤቱ መምህራን ነገሮችን በተለየ መንገድ ለመስራት ያልተቋረጠ ጥረት ያደርጋሉ።					
18. [IE]	የት/ቤቱ ተማሪዎች ጠያቂ እንዲሆኑ ምቹ ሁኔታዎች ተፈጥሮላቸዋል።					
19. [CEK]	በት/ቤቱ አሁን ባለው እና በሚጠበቀው መካከል ያለውን ሂደት እና ክፍተቶችን ለመፈተሽ ስርዓቶች ተዘርግተዋል።					
20. [CEK]	በት/ቤቱ መምህራን የተሰሩ የምርምር ስራዎች እና ማስረጃዎች ሲፈለጉ በቀላሉ ሊገኙ ይችላሉ።					
21. [CEK]	በት/ቤቱ ለቋሚ ውይይት እና የእውቀት ልውውጥ መዋቅሮች (structures) ተዘርግተዋል።					
22. [CEK]	መምህራን ለማስተማር ስራቸው ጠቀሜታ ያላቸውን የመረጃ ቋቶችን (databases) የመተንተን እና የመጠቀም አቅም አላቸው።					
23. [CEK]	የት/ቤቱ የዕድገት እቅድ በማስረጃ የተደገፈ፣ ከራስ ግምገማ በመማር ላይ የተመሰረተ እና በየጊዜው እየዘመነ የሚሄድ ነው።					
24. [LE]	ትምህርት ቤቱ የተከታታይ ሙያ ልማት (CPD) ያስገኘውን በጎ ተፅእኖ በየጊዜው ይገመግማል					
25. [LE]	ት/ቤቱ ለትግሮች እና እድሎች ፈጣን ምላሽ ለመስጠት ውጫዊ አካባቢውን ይፈትሻል።					
26. [LE]	የት/ቤቱ መምህራን ከሌሎች ት/ቤቶች ጋር በትብብር ይሰራሉ፣ ይማማራሉ እና እውቀትን					

	ይለዋወጣሉ።						
27. [LE]	ት/ቤቱ የመምህራንን የዕርስበርስ መማማር ለመደገፍ እና ቀጣይነቱን ለማረጋገጥ ከከፍተኛ ትምህርት ተቋማት፣ ከባለሀብቶች ወይም መንግስታዊ/መንግሥታዊ ካልሆኑ ድርጅቶች ጋር ይሰራል።						
28. [LE]	በት/ቤቱ የአይሲቲ ቴክኖሎጂ ከውጪው አካባቢ (ለምሳሌ ከሌሎች ት/ቤቶች) ጋር የእውቀት ልውውጥ እና ትብብር ለማመቻቸት በሰፊው ጥቅም ላይ ይውላል።						
29. [LL]	የት/ቤቱ መሪዎች የመማር አመራርን (learning leadership) ሞዴል ያደርጋሉ፣ ለምሳሌ አመራርን ያጋራሉ፣ተማሪዎችን ጨምሮ ከመምህራን መካከል ሌሎች መሪዎችን ያሳድጋሉ።						
30. [LL]	የት/ቤት መሪዎች በመምህራን መካከል ሙያዊ ውይይትን፣ ትብብርን እና የእውቀት ልውውጥን ለማጎልበት በመዋቀር (structure) የተደገፈ ጥረት ያደርጋሉ።						
31. [LL]	የት/ቤት መሪዎች የት/ቤቱ ተግባራት ከራዕዩ፣ ግቦች እና እሴቶች ጋር የሚጣጣሙ መሆናቸውን ያረጋግጣሉ						
32. [LL]	የት/ ቤቱ መሪዎች ከሌሎች ት/ቤቶች፣ ወላጆች፣ ማህበረሰቡ፣ ከፍተኛ የትምህርት ተቋማት እና ሌሎች አጋሮች ጋር ጠንካራ ትብብር መመስረት ችለዋል።						
33. [LL]	የት/ቤቱ መሪዎች ለተማሪዎች ትምህርት እና ሌሎች ፍላጎቶች ምላሽ ለመስጠት የተቀናጀ ስራ ይሰራሉ።						

ውድ ጊዜዎትን ስለሰጡኝ በጣም አመሰግናለሁ!

Appendix-3

Interview Guide items for school principals and teachers

Interview Protocol

Thank you for participating in this study. Today, we'll discuss how your school engages with post-1994 instructional reforms like active learning, continuous assessment, action research, reflective practice. Your insights will help me understand the learning processes around these changes. This interview will take approximately 60 minutes. All responses will remain confidential. Do you consent to proceed? May I record this conversation for accuracy?

- 1) Could you briefly share your professional background your qualifications, teaching or leadership roles, subjects taught, and how long you've been at this school?
- 2) Can you share with us the number of students and teachers in the schools (for school principals only)?
- 3) How the school acquires knowledge on post-1994 instructional reforms like active learning, continuous assessment, action research, and reflective practice: (a) at the school level; b) at team level; and c) at Individual teacher level?
- 4) How do teachers in the school share with this knowledge between and within teams?
- 5) What is the source of instructional knowledge for the school, teams, and individual teachers and where does this knowledge store?
- 6) What does the school do with this knowledge (if any)? Do individual teachers, teams, and the school community as a whole have freedom to generate their own meaning out of this knowledge/ information?
- 7) What facilitates/inhibits individual, team, and school-wide learning of the above-mentioned instructional reforms?
- 8) Does the school have a vision and mission? What is the focus of this vision? and mission? How was this vision and mission developed and shared with stakeholders?
- 9) Are there opportunities for staff continuous learning? Can you name these opportunities? Who created these opportunities? Why are such learning opportunities created? To what degree these opportunities were continuous/lifelong?
- 10) Do teachers in the school work in teams? If yes, on what issues do teachers work in teams? Can you name some of these teams which have been previously/currently functional?

What is the degree of collaboration you observed between team members? Do these team-ups self-initiated or established by someone else?

- 11) Do teachers in the school encouraged to make inquiry, innovation, and exploration? How do this encouragement from the school/leaders manifested? What inquiry/innovation/exploration practice does the school/team/individual teachers undertake yet including instructional technologies? What looks like the freedom the school/team/individual teachers have to make inquiry, innovation, and exploration?
- 12) Are there systems in the school for collecting and exchanging knowledge about active learning, continuous assessment, action research, and reflective practice? If yes, please elaborate the systems, and how these systems are embedded within the school system? How do these systems are connected each other the accomplish the school's vision and mission?
- 13) What opportunities are these to the school/teacher team-ups, and individual teachers to learn from other nearby schools about teaching and learning?
- 14) How do the school leadership (principal/vice principals, supervisor, department heads, etc.) support the learning of the above-mentioned reforms in the school context?
- 15) Any additional comment you want to add, please

Thank you for devoting your time!

Appendix-4: Transcriptions

Case-1 Principal (11/3/2016)

A. What are the major achievements of the school?

I. Income Generation

- Organizing the administration: - schools should be led by the people. The budget we were receiving from the government is very small. It is not enough to run the school. We have

- o Preschool-308

- o Primary -1100

To strengthen the school in terms of inputs (materially and financially), the participation of the people's is very important. Then, I have conducted a study and find out that the participation of the people in this regard is very important. Making the people to make financial contribution was among my first tasks.

The total amount I have received from the city administration is 16,000, which is quite small amount. It is literally impossible to manage a school with 1400 students with such small amount of money. even, it is not enough to pay a one-month salary of contract workers. For instance, I have six caretakers for preschool (each with a salary of 2500 birr), three guard, one IT and there are also Janitors. I pay up to 25,000 birrs per month for contract workers. The cost of the paper of the mid-exam costs more than 16,000 birr. It is the people who pay the salaries of these workers. Therefore, the people involvement is extremely important.

Given all the circumstances, I can't sit and take monthly salary. I have to serve the people who helped me to educate. I have to devote and support my community. It is interesting that I have brought a visible change in the school. When I arrived at the school, there were about 14 or 15 preschool students. But now, we have more than 300 students. The people are positive and involved greatly in advancing my plans.

I have also tried to find other sources of income. I set up four container shops in the city. They are also serving as additional sources of income. The school earns a minimum of 150,000 birr yearly from the shops. Generating income is one of the main tasks of a principal.

II. Reducing the student-class ratio

We build additional building and tried to reduce the high student-class ratio. Currently, the ratio is reduced to 1 to 35. The viability of classroom enabled us to provide a full day education to eight grade students.

III. Improving the parent-student relationship

We make the parents to participate in the learning teaching process through various organization, such as in parent committee. They participated in several ways such as providing advice to the students and making financial contribution. Financially, they contribute up to 400, 000 birrs annually.

B. What are the major tasks done in relation to teachers and what was their contribution to the achievements?

I. I have attempted to build a positive relation with the teachers. I tried to lead by example.

We are able to create teachers who make adequate preparation for their lessons. We think we are successful. The result we achieved on the student's performance is a testimony to this.

- We have received the zonal award for more than six time and at woreda level also were awarded for more than six times. At regional level, we are awarded three time. All of them were for achieves in improving the students' performance (educational sector).

- The awards were given after adequate inspection of our works by the respective authorities. They evaluated our performance in all aspects.

At national levels, we have also received awards at national level for helping our students learning. For instance, better performance demonstrated by students from grade 1 to 4, we were awarded a piano (costs more than a million birr).

However, the recognition they gave is limited to material. It would be better if they gave me an opportunity to continue my second degree. This is the negative part of the system. They wanted us to remain here. They do not want us to progress and contribute something bigger somewhere else.

Case-1 Principal

Interview (12/3/2016)

Experience

I have 12 years' experience of teaching and 11 years as principal, totally 23 years.

There was a vacancy for principalship. I applied for the job and succeeded to get it. They gave us a training and then, I began my job as principal. I have BA degree in Education Planning from Adama University, which is very helpful to my job.

Where else do you serve as a teacher and a principal?

In my 12 years of teaching experience, I worked in many schools but as principal I worked in one additional school other than Case-1.

A. Do the school have vision? what is its focus? in what ways did it developed?

Education is not something that every school could develop its own vision. We all have common visions. Our vision is creating citizens with perfect personality and capable of advancing the country forward. This vision is given to us at national level; it aimed at assuring the continuity and prosperity of the country. Inside it, there are also individuals, who have the same vision of improvement and prosperity.

B. What was the contribution of the school while the vision is framed?

What we did in this regard is adopting the vision send from the center to the local circumstance (top-down). We tried to frame the school vision as per the interest of the society. We have tried to understand what the society expect from the school.

There is

entrenched poverty

high illiteracy

low motivation to send children to school

To encounter this problem, there should be a school with vision. This was the base of our vision.

C. What was the participation of the students and teachers in framing the vision?

Though it is difficult to say it is satisfactory, students have participated in our strategic plans prepared for three and five years. The society is also participated, everyone has a share to contribute. This has helped the interest of the society and include in the school plan.

The school has a committee with six members. It has the duty of collecting data from the stakeholders' society, students, teachers and analyzing it, which then be used in the preparation of the school plan. Besides, it sets the priority of the school.

D. Does the vision of the school changes in your 11 years role as the school principal? If the source of the vision is the society, the visions of the schools vary from place to place (given that

the interest of the society various in time and place); if so, do you think that schools in different places have different visions?

No, schools in different places share similar vision. In addition, vision of creating citizens capable of solving the problem of the society has not been changed both in time and place. The difference lays on our mission, that is our way to the common vision might vary. We have also specific objectives. In this regard, there might be variations.

E. Is there any direction given by the woreda, zone and region about the content of the vision? Yes, they give as a content that could be used as a starting input to define our vision. If we find their idea acceptable, we could use their plan. Mostly they send us plan of the woreda, Zone and the region, then we prepare our plan based on theirs.

F. How do you share the vision of the school with stakeholders?

We organize meeting with stakeholders to share our plans and visions. Sometimes, we organize meetings with some selected parents and make discussions. Besides, we also try to collect inputs through questionnaires. Then, we include the inputs collected through discussion and questionnaires.

G. How do you make teachers to include the vision of the schools in their tasks and plans? What about the students?

The main tasks have been done by the teachers, school leaders, parent committee, and school board. It is with these groups that we executed most of our takes.

H. What are the opportunities created for the school community to educate itself individually and as group at institutional level?

- There is a system set for the teachers to upgrade themselves

What about the measures taken to enhance the professionalism of the teachers, which makes them to handle changes in the curriculum and the need of different students?

We have tried to update our teachers through CPD training. It has continued throughout my eleven years leadership. It helps them teachers to update with the existing condition and the students' interests.

In addition, the government gives us training whenever the curriculum/ the book changes. In every three or five years the government change text books. Then, trainings have been given to the teachers to acquaint them with the change.

The NGOs are also involved in providing trainings. We require them to give us education related training based on our need assessment.

The teachers' education college also gives us training. We also work in cooperation with the university. They helped us in science subjects. They send us professionals who train our teachers. In other time, we got to the university for trainings.

I. What are the main topics emphasized in the trainings?

In CPD; - continuous assessment is the most emphasized. For instance, there is training on table of specification that could be used for evaluation. It is time intensive and could not be achieved easily. In this regard, there is a perpetual challenge, what we can do best is reducing the gap.

- Trainings on the preparation of teaching aids and student management are also given.

It varies in every year. We focus on three issues in one academic year. In 2009 academic year, for instance, it was focused on action research, participatory teaching and professional dialogue.

NB: - we included professional dialogue in everywhere's program. It helps teachers to have similar practices in teaching and evaluating their students.

J. At individual level, teachers should be readers. They are expected to have adequate knowledge of their subjects and the mode of delivery and assessment. Is there anyways that you could follow this?

We try to improve the teachers' interest for reading by improving our library. We have committed up to 10,000 birr to buy books. In addition, 10% of the GEQIP (ጀኩፕ) budget is also used for this purpose.

We have the data about how many students and teachers read in the library in every day.

Do you include this (readership) teacher performance evaluation check list?

Yes, the performance appraisal checklist has included both who read and help students to read.

Does this task had done continuously? Have you witnessed this in your 11 years of leadership?

Yes, we have implemented it continuously and seriously. The task has been implemented at all levels at individual, team and school levels. One of the objectives of CPD is this. It helps teachers who acquired better knowledge individual to share with their colleagues. We have ICT room, which enable to access anything that could help them to upgrade themselves easily.

However, to what extent does they used these resources various from teachers.

CPD is continuously implemented. Annually, the teachers have spent sixty hours in every year.

K. What do you do to implement CPD successfully?

The first thing is creating common understanding. We reached on understanding who will be served by the program, the government or the teachers. Because, in many occasion, teachers have the tendency to treat CPD as an imposition from the higher authority. We began the training after reaching on the consensus that CPD is beneficiary for the teachers. We also started the training as the beginning of the year. To encourage new teachers to involve in program, we make experienced teachers to share benefit they get with the new one.

L. Is there any difference in the performance of the team?

Yes, there are different teams with a varied degree of achievements. There is also an attempt to bring the low performing teams to a higher level through supervision and support. We judge their performance based on the portfolio submit by the members of each team. First, it is inspected by the team leaders than by the principal and supervisor. Based on the actual change they bring on the students, we give them feed backs.

M. Are there any other teams organized to facilitate action research, teachers dialogue and participatory teaching?

There are only two teams, the department and CPD. Everything the teachers do first evaluated by the departments.

N. How do you evaluate collaborations between teams and what do you do to encourage collaboration?

May be in month or two moth, we conducted discussion with teams.

How do the CPD teams collaborate?

We provide the portfolio produced by the previous team to the new teams. We also advised them not to copy others portfolio. Because they know that CPD is for the befits of the teachers. They individual and teams also cooperate each other.

The teams are formed based on their teaching shifts. They work in the opposite shifts.

The team are organized based the grade the grade level teaching.

Both the supervising team and peer evaluation team are formed by the principal.

O. Is there any opportunity for the teachers to conduct their own inquiry, exploration and innovation?

We organize a meeting one or two times in a year. Teachers develop proposals and conduct research. Teacher presented their research result and make recommendation on things which

needs improvements. Yet, there is no one so far who come up with something radically different from the existing practice.

What would be your response if someone suggest the implementation of new practices?
We are willing to accommodate any finding that could improve our practice. For instance, we stopped the practice of giving mark for properly keeping exercise books and hygiene based on the research fining of a teacher.

What if someone suggest to stop giving exams to the students based on his research finding.
We will accept and implement the suggestion as long as it serves the interest of the students. For example, we stopped evaluating KG students using marks. Next, we Will implement it for grade one students.

What incentives do you offer for those who engaged in researching?
Yes, we have inceptive packages for the researchers. We award certificate of recognition and other rewards.

P. To what extent do you encourage teachers to invent new technology of teaching and use the available one?

We have an IT lab center. It enables teachers to access anything the teachers need for their teaching. There is also software that we brough from Debre Birhan University. However, I can say that we are up to the expected level. Most of our teachers are very old and lacked the initiation towards new technologies.

Q. To what extent did the school leadership tolerated teachers to freely experiment their findings (Given that they are likely to make mistakes)?

I believe we are tolerant but we never faced a serious problem. What we want is the students and teachers to experiment and learn.

R. Do the school have social Media addresses?

We have Telegram channel. We use it to disseminate our works and share information with stakeholders.

We follow the Telegram channel of the educational department and other schools. This helped as to exchange experiences.

Do you have contact with international institution with better experience?
No, we don't have.

S. Can we say that the system of information exchange (for the teacher, teams, school leaders and the institution) is put in place?

Yes, we can say. Through CPD and IT we exchange idea and engage in dialogues. Particularly, with five schools located nearby, we have a regular meeting in every three months. Our school is a cluster center, so, they come here for discussion. In the discussion we share experiences. The teachers also share experience with other teachers who teach similar subjects.

Are there schools which scored better in grade eight regional exam?

Yes, there are. They are private schools. There are no governmental schools that scored better than us.

T. How do the individual teachers, teams and the institution are interconnected?

They are well connected. It is through this chain that the school is functioning well. Without this chain, it is impossible to conduct educational work.

U. What are the special opportunities your schools have enjoyed that enabled you to accomplish the tasks?

- Positive and optimistic teachers: - this is made possible through repetitive dialogues and discussions. The influence of good and experience teachers is instrumental in shaping the new comers.
- Committed school leaders
- Actively participant community. They are the backbone of the school.

V. Is there any theory of change you used as principal?

I acquired most of the leadership out of the school. Spirituality is very important for me. Exposing what the God done through me is my prime concern.

To which category of leadership do you think you belong?

I can't say that I belong to any of the category. Since, leadership requires traits from all types of leadership styles. Even, sometimes, there are times you required to be lazy.

W. Do you ever participate in the preparation of educational policies?

No, I never participated.

If so, how do you able to understand the policies at this level? Is it not difficult to understand and implement them?

- When the policies are trickled down to us, I tried my best to understand them and implement as genuinely as possible.

- They also provide us training on the policy documents

- The most important is the leadership training I received, though it is short.

The manner the policy documents are prepared and implemented has its weakness

- It would be nice if they prepared the documents after consulting us and based on our suggestions.

- There is also the problem of maintaining the trained school leaders. There should be an incentive to keep them.

X. What the main Challenges you faced throughout your service as school leader? Particularly, in improving the teaching-learning practice (Continuous assessment, Active learning, action research and professional dialogue).

- Unable to get enough support from the top leaders. A lot is expected from the higher authorities

- Lack of trainings that could help teachers enhance teachers' overall performance. For instance, I am giving CPD training for the past eleven years but I never received any training. So, I don't know what CPD is today, we are continuing in the old ways.

- There are policies that contradict each other. For instance, after graduating KG, students are made to return back and start counting alphabets. It is a waste of time and energy.

- o In the curriculum materials there are sophisticated contents which requires advanced labs and teaching aids, which we don't have. Thus, we gave them only the theoretical aspect.

Principal (Principal-1)

A. In what ways do the institution acquired knowledge?

Our main sources of knowledge are government policy documents.

Then, based on this we have tried to get knowledge from other sources such as colleges and universities. The college is one of the main sources in this regard. The college has signed one teacher per school. For instance, the college has assigned on person for the 2016 academic year. First, they took need assessment and then based on it they provide trainings.

B. How do the teams, departments and forums in the school acquired knowledge?

We select leaders of the teams, department heads and forums based on their ability access knowledge from various sources (online, policy documents and seeking support from the

colleges and the university). If they are unable to get adequate info, they consulted me and I tried my best to help them.

C. Do the teams conducted experience sharing with other schools and institutions?

Yes, they do. I have the evidence. We encourage the teams to go visit schools with good experience. They have also brought in good experience from other schools.

D. Do you ever feel that you don't need to go and see other schools experience, since yours is one of the best?

No, we know that education is a lifelong learning. It is not something that you say, completed it at a point. I also know that I am the first because I am able to implement what is come down to me properly, if I fail to do so next year, I will be the last.

- Mostly, in education what we have to do surpasses what we are done.
- Experience sharing helps us to compare what we have done compared to others.

E. What do you do to acquire the experience brought by new teachers to your school and help them to adopt to the school condition?

We provide them training to new teachers to make them customised to the school practices. This includes our contract teachers. We appointed mentors, who help them to adopt.

we also encourage new teachers to share their experience during professional dialogue. If the forward good ideas, we accept theirs.

F. How do individual teachers acquire knowledge regarding their profession? Particularly on the above mentioned four elements.

- We have due respect for experienced teachers. They have good knowledge acquired in their long experience of teaching. We encourage them to share their experience.
- Most teachers are also upgrade their education level. In our school, we have only one certificate teacher.

G. How the individuals, teams and institution share the knowledge they acquired?

CPD, peer supervision and forum are means of knowledge sharing.

H. Where do the knowledge acquired by the school stored?

- We have had copied and soft copies properly stored. In addition, individual are also served as the knowledge store of the knowledge.
 - o I tried my best to make the documents produced so far in easily accessible places. They are properly kept in folders.

- o But we don't prepare list for the file and documents

Do you ever exchange knowledges while acquiring new positions? No, I never think about this. in the future I will do on this part.

I. How do you make the stored knowledge of the institution usable to the teachers? Is there a system set to redefined the stored knowledge of the school as per the prevailing circumstances?

- o We focused on doing the tasks on our hands. Ther is a problem of organizing the documents and preserve for future use.

- o It is rare for us to use policy documents, training manuals and other documents while doing our tasks. Most of the used, the resources located in their respective teams. The problem is searching a wide range of sources in the schools.

In fact, they use the documents to solve the problems and enhance the students learning.

J. How do you evaluate the teachers' academic freedom to interpret continuous assessment, and active learning, action research and professional dialogue as per the grade level and the subject they teach?

We give freedom teachers to,

- teach only the subject they trained for
- decide who will promote to the next class level because they know the student more than the policy

NB. I don't see freedom as the right to put aside portions in the subject. The best they can do is make the time the lesson takes short.

- But if the teachers believe that additional content is need based on research and if he/she convince us he/she can add.

K. The school is 40 years old; do you have the knowledge stored for the past forty years?

- Yes, we have them, they are stored in the warehouse. But when I arrived here, the documents we not properly kept.

- The school did not have fence and its boundary was not properly demarcated. Its actual size is 55,300 square meters. It had 19 class rooms and 26 rooms for other purposes, such as for archive center, finance, janitors, library, guards

- o In fact, there were also good works done by the past leadership. particularly they are able to do good works in terms of school organization.

They reduced the class-student ratio

Establish office for clubs

CPD was progressing well. What I do in this regard is capitalizing on what I have found and try too upscale it.

- We are able to solve some of the problems inherited from the past. For instance, we are be able to form a strong bond between the school and the community.

L. What are the challenges that faced schools as a learning institution?

- Finance is the most serious challenge: - it is not possible to conduct a fruitful teaching-learning process without adequate inputs. For example, it is not possible to make learning practical without input.

- We have also the problem of exploiting the potential of every individual. There is conducive condition for transfer of knowledge. Even, CPD is continuing because it is an imposition.

- What we have stored is not what we have done so far. We have the problem of understanding. We lacked the awareness. Only the part of our work is stored. For example, there is an opportunity to record the CPD practice, the peer supervision, teachers class room teaching in Video and stored it.

NB: the interview has made me to be aware of the importance storing knowledge as institution.

The question is the first of its kind. In the future we will work on it and try to improve.

Interview with teachers (Case-1)

Interview date Hidar 13/2016

Name Hana (pseudonym)

Qualification 1st degree in Amhaic

Experience 23 years + (3+ in the school)

1) Vision

It may have, and this vision often focuses on students, creating good citizens who take responsibility for their own country

How was this vision developed? I was not in this school when the vision of the school is developed. I have never participated in the discussion about vision. If you have not participated in vision development, how you work towards this vision? It is obvious, teaching and learning is capacitating students, therefore, working towards this goal does mean accomplishing the vision. I think it is the responsibility of the school to incorporate the vision in its plan but not teachers. Does the school ever created opportunity to share is vision? The school has a monthly meeting with teachers and in these meetings we discuss about students' learning achievement, teaching and learning, practices to improve in the future, other school affairs in relation to the short, medium, and long-term plan of the school.

2) Opportunity for continuous learning

Q. What looks like the continuous learning opportunity? I think you are asking me about continuous professional development program; (sure) if so, we have thoroughly engaged in CPD for a long time, there was also what so called reflection. During the CPD times the school has four CPD groups which had been working in two shifts. During this time, the teams discussed for two hours in a week on issues sent from the worda education office. Since 2015 E.C the CPD, has changed to department-based professional dialogue where teachers from same department discuss for two hours in a week on how to deliver a given content in the curriculum to students. In these discussions, teachers discuss about the content, teaching methods, assessment techniques, and resources required to deliver the content. And, I am really happy in the new approach to continuous professional development since it specifically focuses on the subject I am teaching. Previously, the worda will sent us one issue, the school selects another one, and teachers would select one more and we study those issues. This was a paper work and too boring.

Q. What other opportunities are created for you to improve your learning? Well, there is experience sharing within the school. Teachers who teach within same departments make peer supervisions where teachers learn each other about how to deliver the lessons to children? For how frequently these peer supervision is conducted? It is undertaken for a minimum of two times per semester, but there are teachers who may go beyond this number, but we never make a peer supervision on the same teacher twice in a semester, we need to find another new teacher for peer supervision since the purpose is to take lessons from different teachers. What makes you to undertake experience sharing in peer supervision? First the Checklist from the school leaders, second self-initiation new coming teachers. Teachers who join the school through transfer adapt to the school culture using this strategy (*no grafting*). These teachers scan teachers and share experiences from teachers they believe are experienced and qualify to lean from. Informally also, we share experiences from teachers we believe are capable to share experiences (*professional capital*). We raise questions, discuss them, and learn on how to deliver a given content and assess them. The problem is, we lack the habit of recording these events and practices. In particular, I lacked this habit! (*limited storing of knowledge about post-1994 instructional reforms*). There are forms also but these grouping are not for capacitating teachers on the how of content delivery and assessment, rather they are established for providing tutorials, make up classes, and other supports for children

to help them accomplish the goals set by the school, and these forms are for grade one and grade eight students. What about departments? The department is responsible to administrative and quality assurance affairs. For example, it checks the quality of assessment questions before they are administered to children. How about on professional development affairs like improving teaching and learning? Have you ever discussed in department meetings? I don't remember! What about the experience sharing out of the school like experience sharing with nearby schools? It is three years since I came here, but I never participated in such events. What about other teachers? Ummm!, in the beginning of the year, we take refreshment trainings with cluster schools, but these are very occasional. This year for example we take trainings on the new curriculum, the previous years also we took trainings on contents like active learning, continuous assessment, classroom management, teaching aids preparation etc. who created these opportunities (self or by the school?) the school provides directions, and the school's direction is based on the direction (checklist) given/sent from woreda education office and zone education department (*prescription*) for example trainings given at woreda or zonal level often cascaded to school level and the school leaders facilitate these sessions seriously (*power coercive strategy*). How continuous are these learning opportunities? It is a day to day practice in the school (ይህ የዘወትር ሥራ ነው፤ መምህሩ በመማር ማስተማር ሥራ ውስጥ እስካለ ድረስ የዕርስበርስ የመማማር፤ የልምድ ልውውጥ የማድረግ፤ ይዘትን መሠረት አድርጎ መወያየት...ወዘተ-በቀጣይነት ያላቸው ተግባራት ናቸው። ምክንያቱም የሥራው ባህሪ ነው!)

Some teachers in other schools say school-based continuous learning practices are tiresome? How do you see this view? Does this view exist in your school? Umm, it is hard to say, CPD is a customary practice in our school, especially the modification that has been made on it since last year make CPD functional and useful. But the CPD that was practiced before last year had been somewhat tiresome and its focus was on paper work. A single topic like active learning, continuous assessment, community engagement ...etc. might be delivered three or more times within a year, and that makes it tiresome. But now, our discussion dwells on how to deliver our lesson, in such discussions what active learning methods to use, what assessment methods to apply and what instructional aides to apply, how to manage the class... etc. are discussed in CPD session. ይህችን ይዘት እንዴት አድርጎ ነው ለተማሪዎች የማቀርባት በሚለው ላይ ነው ውይይታችን የሚያተኩረው፤ በውይይቱ ይህን ይዘት በዚህ መልኩ ቢቀርብ፤ ምዘናው በዚህ መልኩ ቢደረግ፤ የሚለውን እንወያየለን (*lesson study*). And planning precedes this discussion. But when we review documents from the school, we found well organized CPD recordings in the last 11 or more years? Yes, indeed, but it is mandatory to engage in it whether you like or not! የግድ በሳምንት ሁለት ሰአት ገብተን እንሰራ ነበር፤ የየራሳችንንም ዶክመንት እንዳለን። ይህ ግዴታ ስለሆነ ነው ምክንያቱም ሰዓት ተቀምጦለታል፤ ከመማር ማስተማሩ ጋር ጎን ለጎን የሚታይ ነው፤ የመምህሩ ስራ ነው፤ የተሰፈረለትን ስራ ደግሞ መስራት ግዴታው እስከሆነ ድረስ መስራት ግዴታው ነው። መረጃም እንይዛለን፤ ለምን መረጃው ራሱ ደግሞ ለአኛ ሚጠቅም ነገር አለው ተብሎ ስለተነገረን የግድ ማሟላት አለብን፤ አንገለባበጥም! ሁሉም የራሱን ይሰራል። አሰልፏችኑ ግን ጥያቄ የለውም (inhibiting factor to OL in schools)

Q How collaborative are the teacher teams with and between? Teachers in this school work very collaboratively in all the teaming ups! (certainty) How this is manifested? During test preparation for example, every teacher collaborates one another. In preparing teaching aids ‘ባብዛኛው መማር ማስተማሩን የተመለከት ነገር በትብብር የሚሰራ ነው፤ አንዱ ሰምቶ ሌላው ካልሰማ እንኳን መረጃ በመቀያየር ሽረ እንደዚህ ሥሩ ተብሏል ተብሎ መምህሩ ተሯሩጦ የሚሰራበት ነው (*not true team learning in the sense of SLO*) And majority of these collaborations are in teaching and learning per se. who created these team ups? The school!

ምንግማችሁት ነው ድካሙን ፈርታችሁ ነው? አልገመገምኑ...ው...ም፤ የግድ ወረቀት ላይ ተጽፎ ባይቀመጥም እንዲሁ ስታየው እኮ አድካሚ ነው። የት/ት ቤትን ችግር ለምፍታት እኮ የተወሰነ ቡድን በቂ ነው። በት/ቤቱ 50/60 ሰው ቢኖር 50/60 ሰው እዚያ ላይ ከሚጨቃጨቅ 10 ሰው ተቧድኖ ችግሩን መቅረፍ ይችላል፤ ጥናት እኮ በአንድ ርዕስ ጉዳይ ላይ ችግሩን ለይቶ አውጥቶ የመፍትሄ አቅጣጫ ማስቀመጥ ነው፤ ይህን ለማድረግ ደግሞ 5/6 ሰው በቂ ነው። (she is criticizing the previous CPD, challenge professional learning not well tailored to teachers needs)

3) Are there opportunities for teachers to be inquiry, exploration, research, innovation?

Yes, these are rewards from the school for creativity, innovativeness, and research. It is also included in the checklist. Have you ever get this reward? No! do you have any complain? No why? Because the reward is given for those teachers who do as per the checklist, and in this checklist creativity, innovation, and research are included.

But in other schools, teachers make disputes on this issues, why not in this school? What makes you to accept the school's decision? Because the selection of a best performer is selected based on clear criteria and procedure, the best performer is selected for each month and teachers who scored higher in cumulative evaluation score conducted for about 10 months will get the reward እኔ እዛ ላይ መድረስ ከፈለግሁኝ ሰርቸ መገኘት ነው። ያገኙት ከእኔ ቀድመው

የሄዱ ናቸው። were there any complain from other teachers ever? Never! (*good leadership*). Can you name at least three accomplishments that help teachers qualify for this reward? It is based on the checklist, see the checklist (*structured and prescriptive system*). Have you ever conducted action research? No, what about other teachers, yes they did. Last year for instance two teachers from language department conducted action research

- 4) Are there any attempts from you, your department, and the school as a whole to support the teaching learning process using technology?

The school has a full-fledged computer lab, teachers has also personal mobile. We can google what we need from our mobiles and computers. We have also internet access in the school (now ceased due to the security problem in the area). Have you ever used any link to support your teaching and learning via relevant videos, add creativity to your teaching? How do you use technology to support your teaching in general? This kinds of requirements often invite general science teachers (she is Amharic teacher). Any social media page, YouTube link...etc you follow to support your profession? No I don't have! Because I don't have a smart phone. [Q. But there are computers and internet in the school], yep, there are, but I am not using it for this purpose due to personal problem (*prove of personal learning*)

5) Do you have professional freedom? Yes, we have! Can you elaborate it more? What are its indicators? We have freedom to ask what we want from the school, Q. But there complains from teachers in other places about issues like 'teach this way, assess this way, make detention rate zero' so what look like these situations in the school? In our school, there are no these problems 'ተማሪዎችን እናስተምራለን፤ እንመዝናለን፤ ለምን ውጤት ቀንሳችሁ፤ በግድ አሳፉ፤ አንሳልም! ለምሳሌ ውጤት ትንተና ስንሰራ አንዳንድ ትምህርቶች ላይ ብዙ ተማሪ ይወድቃል። ወደፊት ምን እናድርግ እንጅ ውጤት ጨምሩ የሚለን የለም፤ ለተማሪ አንድም ማርክ እንኳን ቸምረን ውጤት ጨምረን ያሳለፍንበት ጊዜ የለም። እንደዚህም ተብለን ተጠይቀን አናውቅም. I remmeber, many of grade seven students failed to pass in the subject I teach, but no one has forced me to add marks to let them get a pass mark (professional freedom). *[From the school document, however, I have observed that teachers are ranked based on their achievement in enabling students achieve better scores]*

Is there supervision support from peers, school leaders, and experts from the woreda? Yes! Did they comment you to teach/assess this or that way? They supervise me many times. Sometimes authorities from the woreda enter my class accidentally, though they didn't give me any comments. But colleagues from my department and the school leaders (principals, supervisor, and department heads) often visit my classes and commented the strengths and limitations they felt (*authorities are yardsticks*). 'ሱፐርቪዘር ዋት ደብተር ቢኖርሽ ብሎኛል አዎ ምቀበለው ነው' (*behaviourist orientation*).

- 6) Any professional engagement you personally did to professionalize your work?

What books you read personally? Yes, there are reference materials I often read to support my teaching. I have three to four reference materials I often use to support my teaching. I have also the modules I used to read while I was in preservice training in my college days. (borrowing book from the library has a reward). How do you share what you read to your colleagues in the department? If they ask me I will share, but if not I don't. Have you ever raised what you read in the professional dialogue sessions? No, why? Umm... no answer. How do your knowledge is shared for the school community then? If you transfer to other schools? How do you share this knowledge to the remaining school community? If they don't ask me for, there is no other means to share for them, it will remain with me.

- 7) What opportunities you observed in the school for collaborative learning like in CPD, peer supervision...etc?

The school has a full-fledged library to borrow the books you like to read, CPD (especially, the department-based one which is started since last year), peer supervision. Who created these opportunities? It is the school leadership, it provides checklist, give support accordingly, and appraise performance continuously. Teachers are also free to ask each other 'እኛ ጋ ይህን ብጠይቅ ይንቁኛል የሚል አመለካከት የለም፤ የምናስተምረውን ትምህርት ይዘት፤ የማስተማሪያ ስነዘዴወን፤ የምዘና ስልቱን፤ መርጃ መሳሪያዎችን እና የተማሪዎችን ስነምግባር መምራት ሳይቀር እርስበርሳችን እንጠያየቃለን።

- 8) What opportunities are there for school-based learning and professional development?

The school has a well-furnished library, moreover, the school has a strong culture of CPD, and the peer supervision is also another opportunity. And it is the school leadership (especially the principal) who created these opportunities. There is also trust among teachers to learn each other ('እኛ ጋ ይህን ብጠይቅ ይንቁኛል የሚል አመለካከት የለም፤ የምናስተምረውን ትምህርት ይዘት፤ የማስተማሪያ ስነዘዴወን፤ የምዘና ስልቱን፤ መርጃ መሳሪያዎችን እና የተማሪዎችን ስነምግባር መምራት ሳይቀር እርስበርሳችን እንጠያየቃለን።) ያልገባን ነገር ሲኖር እኔም እጠይቃለሁ እንሱም ይጠይቁኛል፤

- 9) What do you think are the obstacles that prohibit you active learning, CA, action research, and reflective practice?

Resource problem, for example, we need to give worksheet to students to increase their engagement, but there is no paper to duplicate, recently security problem,

How the school acquire knowledge? Teacher deployment is also a problem; I have taught subjects I am not specialized in! (የተመረቅሁት በቋንቋ ነው። ነገር ግን አንድ አመት ሂሳብ፣ ሌላ ጊዜ ሲገኝህ ሲፈልግ ደግሞ ስነውበት ይከቱኛል። በተመረቅሁበት ትምህርት የማስተማር ዕድል ያገኘሁ ገና ዘንድሮ ነው።) በተመረቅንበት ብቻ ብናስተምር መጽሐፍም ልናስመርቅ እንችል ነበር። A bit surprised, she started here response by asking ‘you mean the school?’ and replied, she laughed and replied I don’t know this. I probed here the school has 40 years since establishment (1985), and how it acquired knowledge for the last let’s say 10 years? How about your team? My teammates acquire knowledge by sharing knowledge through for instance CPD, peer supervision, and professional dialogue sessions. They have also rich experience accumulated from working in other schools. Where do you think the school, teams, and individuals store this knowledge? For example, where you have stored the knowledge you accumulated in your professional career, especially the knowledge about active learning, CA, ACR, and reflective practice? She laughed a lot! And replied ‘You can find mine in the minds and hearts of my students (*transmission model*)’. But you can’t find mine in a piled form! የመጽሐፉ ምሳሌ ሲነሳ በትካሜ አይነት አገላለጽ she replied ‘የኔ እንደዚሁ ነው ባከነው የቀሩብኝ’ Have you ever recorded yourself while teaching? Never! Why? I don’t have that awareness! Have you ever recorded the team learning in the CPD and peer supervision session? No, we didn’t have that tradition yet. If there are teachers/team who have such an experience, I would be very much happy! [We have lived for many years in a CPD approach which so boring]. During this time, we used to pile especial accomplishments in using active learning methods, CA, ACR, and reflective practice. You store your certificate very carefully, but why don’t you store your portfolio similarly.

ሲፒዲን ሦስት ጊዜ አጠናሁ፣ ሁለት ጊዜ በአንግሊዝኛ አንድ ጊዜ ያንኑን በአማርኛ፣ ከነዚህ የተገኙትን ፖርትፎሊዮዎችን። እሊታዊ ዕቀድ አናጠራቅምም፤ ተጠቅመን እንጥለዋለን፤ ነገ በተሻለ መንገድ እናዘጋጃለን።

What are the obstacles that hinder our practice knowledge management? Habit, we don’t have this tradition. Our entrenched belief on knowledge transmission might have affected us not to focus on this new experience. We don’t capitalize personal knowledge to store for later use.

I have finished my questions, thank you

Do you have anything to say? Ya, you interview is like a shouting Cyrene to initiate me store the knowledge I have acquired over years for the future

Thank you very much!

Me too

Teachers' Interview (Case-1)

School: Case-1 Primary and Middle school

Date: 12/03/2016 E.C

Place: Scout office, Case-1 School

Interviewees (names are pseudonyms)

- Kassa (Health and Physical Education, BSC in Sports Science, 37 years of experience/ 9 years in the schools)
- Kidist (Science Teacher, Diploma in Science education, 33 years of experience /11 years in the school)
- Mulaw (Math teacher, Diploma in Math Education, 20 years of experience/six years in the school)

- 1) How did the Vision of the school was prepared? What work has been done to create a common understanding of the vision of the school?

Kassa: - the vision of the school is to create Ethical and physically and mentally able citizens. I have no information on whether the school community has participated in the preparation of the vision of the school.

Kidist: - producing citizens ethically, physically mentally able, and who can take the responsibility of advancing the country.

- What is the source of the vision of the school?

Mulaw: - first the school has brought an initial idea and the school community has discussed them. Finally, the decision has been made.

- The school vision is copied from the Ministry of Education but adopted by the school.
- Is there any way that the vision is connected with the teaching and learning process?

Mulaw: - the daily lesson is prepared in a way that assists the fulfillment of the vision. The students are informed about what they should achieve and the continuous assessment is designed and implemented based on this consideration.

- 2) What work has been done to enable the school community to have a similar understanding of the vision of the school?

Kidist: - we have a discussion with the student's parents on the performance of the student. We encourage them to intervene and assist the students learning.

- The school also occasionally discusses with the school community
- How did you get acquainted with the school vision?

Kasaa: - I never participated in training regarding the vision of the school. But, it is posted on the school billboard. Besides, I have also the motivation to create citizen good in knowledge, attitude, and affective.

Mulaw: - the school regularly conducted discussions with the school community, at least three times in year.

At the beginning of the years, the school also communicated the vision of the school with the teachers, since it is part of the school plan.

- However, no training has ever been organized to acquaint the teachers with the vision of the school.

3) Does the school create an opportunity for continuous professional development?

Mulaw: - yes there is. Uninterruptedly, the school has given professional development training for two hours every week. I am one of the team leaders. I led teams for four years. In the last two years, I have been working on how to deliver the contents of curriculum material to the school.

- In the team discussion topics such as professional dialogue and active learning were emphasized. Particularly, professional dialogue has a special contribution to enhancing the teachers' performance. It helps the teachers to have similar performance in the class.
- We also discuss various issues. CPD demanded to do so.

4) Is there any training opportunity provided by an external body?

Kassa: - short-term training is provided on different occasions to the subject teachers. E.g. The educational office and NGOs participated in providing training.

- We also conducted peer supervision
- There is also a monthly meeting for the subject teachers. If we encounter with serious issue, we could meet early and discuss it.

5) To what extent is the training created by the school and external bodies provided continuously?

Kidist: - it is given continuously. For instance, CPD is given for two hours every week uninterruptedly.

- The peer revision has been also conducted in an interrupted manner.

Mulaw: - there are supportive organizations, which are engaged in continuous support. For instance, organizations that provide life skills training are used to check the practicality of their training. They also demanded performance reports.

- Perhaps, the weakness is the NGOs provide training only for selected few. It has to include all the teachers to bring significant teachers.
- Besides, the training they provided has also lacked continuity
- The training provided by the school is uninterrupted and continues throughout the year.

6) How do the peer education groups are established? How do you give names to the groups?

Kassa: - The name of the peer educational group is given based on shifts like Shift One, Shift Two, CPD, Group 1, Group 2

- Is there any other team established other than CPD founded based on the teachers' peer education?

Mulaw: - we established forums, like eighth-grade language forums, etc. At the department level, the forums discussed issues like how the teaching-learning process is going on. It is different from CPD.

- For instance, the 8th-grade teachers' forum discussed how the teaching-learning process is going on and how students are learning. It also suggested reforms required to enhance the students' learning.

7) How do you explain the inter-team and intra-team cooperation?

Mulaw: - there is good cooperation. for instance, In CPD, every member of the team has a role to play. Topics are divided among the team members and everyone has to make adequate preparations by referring to books and making contacts with higher institutions. Then, share their take on the topics.

Since the topics selected are similar, teams also discussed the issue. They discussed how to deliver it.

- Is there any system prepared to facilitate the exchange?

Mulaw: - we don't have a system, but we have a culture of experience sharing between teachers and school.

- Who established the teams such as forums and CPD teams?

Kassa: - they are already stated in the plan of the school. We have clubs, departments, and forums. The school has established them and then, teachers get involved in them. For instance, the forum follows the teaching-learning process of the students. It makes sure that all the contents are properly covered.

Mulaw: - the school appoints better teachers as the leaders of the team. We have two teams in each shift. The rest of the teachers are distributed across the teams randomly.

The teams are organized in teaching shifts. But, when there is professional dialogue, teachers who teach similarly come together and have discussions.

8) How do you evaluate your academic freedom? To what extent you are free to enhance the teaching-learning based on your findings and innovation?

Kidist: - I have used my method to help the students' learning. For instance, I order students to prepare questions, which are key in helping them to understand the questions I give them, understand the content, and improve their reading ability. It is the trend of every teacher.

- What do you do if you get inappropriate content? Do you have the freedom to adjust the content in the textbook?

Kidist: - I don't have the freedom to affect the contents. I teach the contents of the book as they are. If there is difficult content, I use different techniques to make the topics understandable to the students.

- Why you are unable to make reasonable changes?

Kidist: - I never faced the problem so far.

Kassa: - the school encourages and incentivizes teachers who do research and try to come up with innovative solutions.

I adjust the curriculum content. As a physical education teacher, I occasionally make changes in the content based on their impact on the students. If I found the practice very dangerous, I replaced it with a different practice that could bring the same result.

- Can you change the teaching and evaluation methods based on reading and research results?
Do you think the school, the woreda, and others will permit it?

Mulaw: - the objective condition of the school is relatively better. Our academic freedom is relatively better. Each teacher teaches using his/her methods of choice. No one is forced to follow the curriculum.

- What would be the response of the school, if the teachers make mistakes during their exploration?

Mulaw: - the school takes appropriate corrective measures. The school allows us to teach following our method of choice but if we make mistakes in the process, it takes corrective measures.

Kassa: - in another school, I see that the interest of the principals dominated the school. The teachers do not have the freedom even to demand their rights.

- Is there an incentive mechanism for those who engage in exploration and innovation?

Mulaw: - if the teacher evaluates conducted research, and textbooks or prepares supportive books, he/she will receive an incentive. There established culture of teachers who perform better at the department level.

9) Is there a system that helps the exchange of knowledge between individuals, teams, and the school?

Kidist: - Yes, there is. We make experience sharing through CPD and team supervision.

Mulaw: - Yes, there is. However, it is not a well-developed one. We have a monthly meeting, where the individual and team experiences and achievements are shared with the school community. Besides, better-performing individuals also received recognition.

- I am a math teacher. I have a successful experience in upscaling the methods and knowledge I developed individually to other fellow math teachers. This is done through organizing discussions. We even, share our knowledge with the zone.

Kassa: - We have a culture of knowledge exchange at the department level. We have regular monthly meetings, which we use to share knowledge and experiences. The department also reports what we have done to the school. On its part, the school recognizes the achievements of departments, clubs, and committees.

10) Who comments on the CPD portfolio?

Kidist: - it is the responsibility of the CPD leader to make comments on the portfolio of the team members.

Mulaw: - the CPD leaders have the responsibility to confirm the activities done by the members.

11). What are the favorable conditions that enable the school one of the best performing at the woreda zonal, regional, and national levels?

Kidist: -

- The existence of teacher-friendly administration. The administration gives us freedom and responsibility. This compelled us to contribute as much as we can.

Kassa: -

- Strong leadership. The existence of strong leadership enables others to follow suit and perform well.
- We have the freedom. The administration convinces us to execute our task with responsibility.
- The administration prefers to positively influence teachers instead of taking coercive measures.
- The administration encourages us to face the truth instead of providing false reports.
- The administration also establishes the mechanism of recognition and incentives for better-performing teachers.
- A conducive teaching environment is the other factor. For instance, for Physical education, good training fields are prepared.

Mulaw

- The good leadership encourages the teachers and others to fulfill their responsibility
- The establishing culture influences newcomers to follow the trend and shape themselves

12) What are the challenges you faced in practicing active learning, action research, continuous assessment, and professional dialogue?

Mulaw

- Sometimes the teachers lost interest in CPD. They consider it as burdensome.
- It will be better if the school is released the budget on time.

13) Are there social media pages that you follow to further develop your profession?

NB: - all three participants of the interview responded that they do not use social media for their professional development.

- If so, what are the sources of your knowledge and professional skills?

Kassa: - I have acquired them throughout my education starting from my childhood. I am highly influenced by the activities of my teachers.

- Regarding actual teaching-learning, my sources of knowledge skill are higher institutions

Kidist: - I follow TV programs regarding how to teach children; I also do my research on the students and adjust my teaching accordingly.

Mulaw: - I admitted that we are not trying to update ourselves moving beyond CPD. We have gaps in exploiting technologies. We have done little to upgrade ourselves, except for what we have gotten from our college experience.

- Do you ever take individual initiatives to search and get training that could assist your professional development?

Kassa: - the colleges occasionally give us short training on active learning, CPD, continuous assessment, and action research.

Teachers' interview (Case-1)

1) How do the school, teams, and individual teachers learn concepts like active learning, continuous assessment, action research, and reflective practice?

Hiwot (pseudonyms) (math teacher): - we acquired these concepts through peer support, training, and making connections with teachers' education colleges. For instance, we conduct action research that is recognized at Woreda, zonal and regional levels. We also support each other through CPD. Regarding active learning and continuous assessment, I first acquired knowledge about them during my training in the teachers' college. Still, I used the modules and exercise books as reference materials in my teaching career.

➤ Do you ever receive training organized by the school (the principal and supervisor)?

Yes, at the beginning of the semester and during CPD, the principal gives us training. The supervisor also gives when new directives and documents come from the top [WEO, ZED, & REB]. The supervisor never gives us training on the above-stated issues.

Aselefech(science teacher): - the school provides training about the stated issues through CPD. In CPD we have teams, through which we have provided training to the team members. Each team has been given the responsibility of providing training on different types of active learning.

➤ How did the team organize?

- It is organized through CPD. The team is organized based on subjects and teaching shifts. Then, they select various issues for training. Then, each member of the team will participate in providing training to the team. Finally, we report, what we have done to the school.
- We share experiences through peer supervision. this helps us to improve our teaching method and evaluation methods.
- We have discussions in the department on various issues
- We also conducted action research individually and in teams (based on subject). Most of the time the research is conducted individually

➤ What about receiving training at the institutional level, particularly planned and budget-supported training?

Not much. At a point, some teachers were sent to Teachers' college and received training. Those who receive training also provide training to their colleagues. There is no planned training provided by the school. I get most of the knowledge on the stated issues from my colleagues.

➤ What about acquiring knowledge on the stated issues at the individual level through reading books and following social media?

The school provides us a free Wi-Fi and we have tried to get new information, which could help us to improve our teaching. Particularly, science teachers are active in this regard.

- What about getting enough knowledge of active learning, evaluation techniques, and teaching methods?

We tried our best to help our students. If there is a student, who is not good in his performance, we first approach him and try to understand the problem he has through researching. Then, we intervene to solve the problem the student faces.

- How many books have you read on the stated issues so far?

Not much. I read books to provide training for CPD. Since we teach children, we use textbooks. Hiwot (Math teachers): - I read books and watch videos. Since I am a student currently, I read a lot. So, I am doing my best to enrich myself and help my students. Mostly, I read books during the preparation of plans and classroom teaching.

- How do you choose evaluation methods and teaching methods?

Some books in the library help us to decide on teaching and evaluation methods. More importantly, I use my books and exercise books. CPD has also its roles.

I tried to make the lesson clearer by connecting the lesson to their daily activities. For instance, I tried to connect geometry with their games and lunch boxes, etc...

Aselefech (science teacher):- I read support books on my subjects. My reading is mostly on the content.

2) In addition to the above-stated topics, on what issues have you received training?

Aselefech (science teacher): - on student behavior and how to improve the student's performance through CPD, as a team. We identified the topics based on the challenges we encountered.

- Is there training given at the school level for the school community?

Yes, there are. We have received training on science kits, Avaces, health and anti-aids, and civic and ethical education.

- Have you ever received a certificate of participation for attending training at the individual level?

Hiwot (math teachers): - Yes, I have received training in basic computer skills. The training helps me to prepare worksheets, notes, and exams for my students and I prepare the roster using a computer. In addition, I prepare teaching aids.

This year, the internet connection was interrupted, which created an obstacle in my learning. I used to watch videos on teaching methods and implement them in my classroom.

I have received training on AVACS. It was very helpful, which I used to improve the basic math skills of my students.

Aselefech (science teacher):- I have received a certificate from the Red Cross.

3) How do the teachers in the school share the knowledge and experience acquired through different means? Ex. Do you have a group Telegram page or discussion forums?

Aselefech (science teacher): - we share our knowledge and experience through our CPD team and department. We have also telegram pages, which we use to share experiences.

Hiwot (math teachers):- at least once a month we have a meeting at the school level which helps us to discuss various issues. At the meeting, we discussed the above-stated issues based on the request of the participants. In addition, we have discussions on the issues at department levels every week.

The supervisor also periodic supervision. Besides, we also make peer supervision in a planned and organized manner.

- We have also received training from the teachers of schools in our cluster. The training was on the new curriculum.
- The cluster meeting is organized by the supervisor

4) Where do you think is the knowledge acquired by the school stored?

Hiwot (math teachers): - All the work we have done and discussed is recorded on the minutes of the CPD, the department, and the school.

- Is there any chance that the knowledge is stored in hardcopy files or soft copies? Ex. The videos of your CPD training, classroom teaching, or any other activities?

Hiwot (math teachers): - No, I didn't see anything recorded in the video. But there were some attempts by the vice-principal to recode activities in video. He used to keep them on the computer.

- Do you ever use the stored knowledge as a reference for training?

Yes, we did. We used them not to repeat the previous mistakes. But we don't solely depend on them. because the problems in the past years might be solved and new problems appear. Hence, we discuss new issues and at the same time, we refer the documents from the past.

- Do you ever use the knowledge stored by the school to solve the problems you have faced?

Mostly, I seek the support of experienced teachers and those who teach in higher classes. In addition, I refer to books on the topic.

Aselefech (science teacher): - some teachers are considered as sources of knowledge in every subject. In science subject, for instance, I used to ask a teacher named Fatima (pseudonyms) for help whenever I faced problems. However, many teachers preferred to refer to books instead of asking for help from colleagues.

- What makes her a better teacher? Is that because she is a reader or her educational status?

She has a better education and experience. She has an extended experience teaching science.

Regarding methodology: - I solve the problem by myself. I have no problem. My educational background in special needs helps me a lot.

5) Where is the knowledge produced at individual, team, and school levels stored?

Unidentified respondent (head of Female children club): - we have our ways of storing knowledge. Maybe in our notepads, memory, and keeping training materials.

- How does the school store the knowledge?

Unidentified respondent: - individual teachers recorded their training on the portfolio. We have minutes for the work done at department levels. There is a forum for teachers, who teach the same grade level. Here, the forums keep minutes. There is no information stored in video or soft copies.

- 6) Do you have the freedom to adjust curriculum materials and other directives as per the subject you teach and grade level?

Aselefech (science teacher): - yes, we have, if we want. I have the right to adjust my teaching evaluation method. What we can't do is change the mark allocated for each category of assessment methods. But still, we have the freedom to organize each assessment method. Even, regarding the mark allocated to each assessment, I make adjustments based on the inspection I make in the class.

Hiwot (math teachers): - the school fixed the total mark of the total assessment. The mark for each continuous assessment is fixed by the subject teachers. We have the right to fix the type and number of questions based on the lesson and students' needs.

- Do you have the freedom to choose the content of CPD?

Hiwot (math teachers): - Previously, we have the right to choose the contents based on the main problems that faced the school. Then, we have a discussion to solve the problems. But since 2015 E.C., we have been told to form groups based on the subject we teach and work to solve the problems we have faced while teaching. We don't know who introduced the new directive. We have the right to select the content we want to work on. Focus point is different from other teachers who teach different subjects. Currently, all math teachers are working to have a better understanding of the new curriculum.

- 7) Your school is a better-performing school in the woreda. What are the factors that help to achieve this success?

1. There is a respectful administration. The school administration awarded better-performing students. It is based on the issues based on the above-stated issues and the contribution the teacher makes in enhancing the students' learning. The achievement of the teacher is evaluated and recorded every month and finally awarded at the end of the academic year based on his/her performance.

2. The teachers in the school are the most experienced. Everyone has an extended teaching experience. Sixteen years is the least experience in the school. Teachers devoted themselves to helping students, including using their spare time. The teachers took responsibility; they do not wait for the order from the superior.

- Compared to other schools, the teachers in this school have a positive attitude towards CPD. What do you think is the reason?

There are many reasons. We use CPD for many purposes, such as

1. To improve our assessment methods. We discussed how continuous assessment should be and brought changes to assessment implementation.

2. Improve students' conduct
3. We use CPD to create favorable conditions for our students, as the administration has done for us.
4. The teachers are committed to helping students learn and change the future.

8) Do you think that your school can perform better than what it has already achieved? What are the hindering factors?

Hiwot (math teachers): -

1. Unable to properly exploit the conducive environment we have. We can use the university and the teacher college, to enhance our performance. If they help us more, we can do better than we already achieved.

a. The support we have received from the institutions is very low compared to the resources and the knowledge they have.

2. If we get incentives, we can be encouraged to learn and perform better.

➤ What are the factors that hinder you from reading on the issues stated above?

Aselefech (science teacher): -

1. I am a family leader. I have to work in my home to support my family. So, I don't have much spare time to read.

2. I have also a health issue

3. There is no encouraging environment. Everyone is not equally motivated.

4. The school has also the problem of creating the setup to provide training.

Interview with teachers (Case-2)

1. Aesthetics teacher, Diploma in Aesthetics, 12 years, 2 years in the school, Aesthetics
2. Biology teacher, Biology Degree, 23 years, and 11 years in the school
3. Mathematics, Diploma in Mathematics 23 years, five years in the school
4. Language teacher, Diploma in Language (Amharic & English), 13 years, two years in the school

1) Does the school has a vision

Schools naturally have vision during establishment, and the school has a vision that aspires children to be good citizens. *Where does the vision emerged and what was your participation during formulating the vision?*

Biology Teacher-I think it is developed by the school, in the past yes but now laugh!

Aesthetics teacher

Does the school make discussion on the vision of teachers in school meetings? Umm, occasionally yes, but most meetings focus on **improving students' score performance** and we make series of discussions in this aspect. Nevertheless, from my experience in the school, I didn't participate in formulating the vision or shaping it in discussion. Have you participated in preparing a strategic plan of the school? No I didn't!

Biology teacher

Yes, the school has a strategic plan, *what is your participation in preparing the strategic plan?* My participation is in effectively implementing the plan. And stakeholders like teachers, students, parents, and others participate in providing input (data) to the strategic plan.

2) what learning and growth opportunities does the school created for teachers? And how these learnings are taking place?

Aesthetics teacher

Yes, to start with, we had opportunity from ACD (local NGO) for ICT training; unfortunately, I and my colleagues didn't take the training due to the fact that the training was not within our

ability. We are novice to ICT but the trainers consider us as if we know the basic ICT concepts and skills.

Biology teacher

The school organizes different trainings, like what (I probed)? For example, on continuous assessment, test preparation (paper and pencil test) and other trainings that could help us improve students score performance. These trainings are sometimes organized in our school and most often in the cluster centre. *Could you estimate the number per year?* It depends on the plan, but it may be three or four times a year. For example, the ICT training from ACD was facilitated by the school though it remained unsuccessful. Actually I took that training and I was the only one in the school to take that training. Before I took this training I didn't have any know how about ICT, and now I am able to write my own tests and letters using a computer. Moreover, the school sometimes organize training on contents that are relevant to improve the teaching and learning process. It also helps us to share experiences between us. For example, previously there was CPD through which we share experiences within departments. We also participate in peer supervision to share experiences on how to teach a given content. You said 'previously' about CPD, doesn't exist now? Yes, it is now changed to discussion at dep't level. Now, teachers who teach same or similar subjects share difficulties they faced while teaching. *Which one do you prefer? Why?* The new approach is better. The previous CPD focus areas sent from above and were mandatory for everyone to take. For how long you share experiences? For two hours per week. What issues you discuss in such meetings? I may face contents which are difficult to me to deliver for students, and often share experiences from my friend who teach the same subject on how he/she has taught the content. The teaching methodology I use to teach may not be understandable to students, but may friend who may use a better teaching method that is understandable to students, and peer supervision is meant to narrow this gap. And I have practical experiences in this regard.

Do you document these practices for future learning and reported to the school leadership? Can we get the portfolios? Silence! Portfolio? Umm., we may find from the department (but these documents were not available in the department).

Mathematics teacher

Bethlehem Tadesse, 23 years' experience, five years in the school, and Diploma in mathematics

With regard to peer supervision, I teach mathematics up to grade four, and I share experience with another teacher in the school who teach mathematics (they are only two in the school who teach mathematics from grade 1 to 4). We observe each other in the class and much of the time we make post-supervision discussion. Last year, I teach in grade 1 and four and she teach in grade 2 and 3, and this year we have exchanged the grades. I ask about the contents I found difficult to understand and to deliver to students, and since she has taught the content last year, she shares me her experience on how she treated that content.

Aesthetics teacher,

In peer supervision, we first planned our lessons collaboratively and give comments each other on the daily lesson plans we prepared. And we supervise each other while delivering the lesson as per the plan. And after class, we discuss on how the lesson was delivered? What were the limitations? How these limitations could be minimized? For how many times do you execute the peer supervision? We undertake twice per semester!

Are there any forums other than CPD that aims to develop teachers professionally? I mean on how they should teach, assess learning, solve learning difficulties of students using research...etc?

Biology teacher, no other groupings other than CPD, but there are co-curricular clubs. How many are there? About three like red cross & health, spana, ... Do these co-curricular activities support teacher learning? He speaks about their contribution for students' learning. *They often speak about students' learning than their own learning (there is a feeling of being adequate which is a disability called ignorance of own limitations).*

The focus of this study is teachers' learning

Aha! Said a biology teacher and replied the WEO provides us upgrading opportunity; what about the updating, I probed? Oh, I said previously that there are occasional trainings given at the cluster level and in some cases in the school too.

You took training in colleges and universities, and you have participated in different trainings after you get into the profession? Which one influenced your teaching the most?

Aesthetics teacher- the training I took while I have been in the profession. What about your career related to active learning, continuous assessment, research and reflective practice? I learnt these concepts while I was in teacher training college, and as a teacher I am using that knowledge

Biology teacher-both! Could you explain it? I acquired initial knowledge from the teacher education college I have been taught. I started my career as a certificate teacher and now I am degree holder in Biology. In the course of my career in college/university, I learned about active learning, continuous assessment, action research, and other related concepts. And after being employed, I have learnt from my colleagues on how to teach, assess, and manage students' learning. And, I integrated these two together while teaching students.

Mathematics teacher- both but I think what I learnt in the profession outweighs what I get in the initial training. I worked in different schools and I got lessons from these schools while working with many teachers. But, the most I learn about continuous assessment, active learning, action research and other related concepts is from the college I have been graduated.

There are research and government reports which claim that teachers little implement active learning, continuous assessment, action research, and reflective practice? They claim that teachers teach in the way they have been taught. How do you see this claim?

Biology teacher- Uhh, we are trying to implement these reforms as much as we can.

Language teacher- That might be true, but the problem is inconsistency of the reform concepts. There are occasional trainings for teachers on these reform concepts, but አንዱ የሰጠውን ስልጠና ሌላው ይሽረዋል፤ I think it is because of this problem that teacher stick to the traditional way of teaching.

Is there any collaboration between structural and professional groupings (CPD, Dep't, co-curricular)? If yes, tell me what the collaboration looks like!

Language teacher- the teachers in the school are all veteran and there is collaboration between teachers. But there is no formal way of collaboration.

You are working to create students who are problem solvers, critical thinkers, and creative thinkers. Do you have these qualities? What opportunities does the school created to be this kind of teacher? For example, did the school created opportunities to conduct action research?

Biology teacher- previously, I use to conduct action research while I was in other school (three), but now I didn't work. Have you ever been awarded at Woreda or zone level? No!

Language teacher- I used to work while I was in other school (Wofmargefia)

Mathematics teacher- I used to work previously but in this school I didn't work

Why stop to work ACR in this school?

Language teacher- While we were in other schools, we provide what we are expected to do, but here.... (laugh)not that much forced to do, and other supported her reply in chores.

Aesthetics teacher- we had ample time when we were in schools in the country side, but now we have other personal assignments to accomplish at home. Is it not included in the school's checklist? Yes, it is included, but we missed the score from it for we are not conducting it.

Do you support your teaching in technology? Are there professional pages (telegram, face book, YouTube...etc.) that you follow to improve your profession?

Biology teacher- I don't have pages I follow, but I use laptop and projector to deliver my teaching. But sometimes, I visit you tube when I face difficult contents.

This school was established in 1954 E.C, almost 60 years! How it has been learning the policy and reform ideas sent from the ministry of education?

Four of the participants asked me to repeat the question; I repeated the question

Mathematics teacher- the school has no any progress overtime due to different reasons. The school compound is too small, it has no certificate of ownership from the municipality, and the

place it is located is not suitable for students' learning (sound) [it is closer to a religious institution]

How it stores the knowledge it has learned since 1954 E.C?

Biology Teacher-I am not clear about the questions [I present information processing cycle on how human beings learn]

Biology teacher- I makes experience sharing with cluster schools, and most dominantly sport festival, Q & A competition. We stood as back bencher in the Q & A competition actually

What were the mechanism the school used to exploit experience from new coming teachers? Mathematics teacher said, the school took experiences from me about lesson planning

Language teacher- I was assigned as centre coordinate for teaching aids immediately I come from another school. *Does the school ask your experience?* Yes, the principal asked me to take the responsibility. Fortunately, I had the experience before and I took the responsibility willingly. By the time, the centre has no any plan to execute its activities and from my previous experience, I prepared the plan.

Are there teachers whom the school use as hub of experience sharing (23 teachers in the school)?

Yes, indeed (all answered in chores), teacher Shumye (Language) and teacher Girma (Biology teacher). How the knowledge from these teachers is shared to other teachers? *Does the school created any mechanism to share the knowledge from these teachers?* All the participants kept silent, rather teachers who faced difficulty of contents and methods of teaching share experiences from these teachers. No formal way of exploiting the knowledge from these teachers.

You (for biology teacher whom teachers consider a hub for experience) have acquired knowledge about how to teach students, how to assess students, how to conduct action research, and how to be a reflective PR actioner? Where do you store this knowledge?

What do you mean, it is stored in my mind! *what if, if you get transferred to other school?* Umm, I am trying to share with other teachers but not formally. I did this by my own personal will; for instance, last semester, I organized a student dialogue to teach biology in an innovative way, I

have invited other teachers in the school to attend the dialogue just to share with them the method I am trying to exercise.

Mathematics teacher- the knowledge is stored in me and inside the school? *Would you explain it more?* I submit what I worked in document form to the school, and it is the responsibility of the school leaders to keep the documentation safely. *What about the knowledge of the school? Where we can find it?* Uhhh said four of them just as a sign of wonder, a biology teacher said, may be in the school administration. *I explained the question then, you worked on CPD, you conducted action research in the school, and you make peer supervision. Where can we find the lessons learned from these documentations?* Biology teacher replied, may be in the library and may be with the school administration (*I didn't find any of these documents in the library and in the principals' office*).

I asked the Aesthetics teacher, how many books you have in person related to the subject you teach (that can be used to refer about the content and the method of teaching)?

I don't have books in soft and hard copies, I worked in four different schools before I came to this school. I used to refer to books from those schools but I didn't have any reference material I personally own.

Biology teacher- I don't have teaching materials I prepared, but I have reference materials I personally bought (I saw these materials in his office)

Do you have any team for reading? No

What were the challenges to learn about post-1994 instructional reforms?

I started to conduct action research last year, but I faced different challenges?

Time

I teach 20 credits per week, I lead three co-curricular clubs, I am expected to teach students with different learning ability and pace, I am expected to support students who are lagging behind. Consequently, I stay full day in the school. And, this is a challenge for me to worry about learning active learning, continuous assessment, action research, be reflective practitioner.

Students reluctance

It is difficult to make the teaching learning process student-centred because students don't have interest to participate. They expect everything from the teacher, and therefore, we little care about student participation. ተማሪ ተኮረ ለማድረግ ተማሪው መሥራት አለበት። My focus is to cover the content on time as per the annual plan (Language teacher).

Contradiction between reforms

Participating students in the teaching learning process needs time, on the contrary we are required to cover all the contents as per the annual plan. It is difficult to accommodate these two demands (Mathematics teacher)

We prepare students especially in middle school level for regional examination; it is a must to cover the portions for students to score at least a pass mark. Moreover, the exam focuses on knowledge which a bit contradict with the idea of implementing continuous assessment and active learning which aim to make students changed in knowledge, skills, and attitude (Biology teacher).

Your school is ranked in the bottom level in school standard evaluation, why is it so?

Biology teacher- I don't feel this rank is given to the school because of not working hard, it is because the school compound is narrow, there is sound pollution (cars and religious institution). We don't see posters in the school compound about reforms ideas unlike in other schools, why is so? The school compound is so small to make this (unsound). But there is time that was ranked in the 3rd level? Maekele and betemukera lay yetekenese ale, CPD lay beagbabu altetegeberem, yalewun neger yalemcheres, jemiro yemetew neger silale askenisbetal

Of course yes, our rank was level-III before some years ago, many factors might have contributed, one of this is CPD, we didn't have practiced it consistently, we didn't finish the ተሙማ ላይ በአግባቡ አልሰራንም፤ የተጀመረውን ያለመጨረስ፤ ጀምሮ የመተው ነገር ስላለ ውጤት አስቀንሶብናል ‘‘We did not work properly on CPD. Not finishing what was started, because there is something to leave behind, it reduced our results, Biology teacher’’

Declaration

I, the undersigned, hereby declare that this dissertation is my original work. All sources consulted and referenced in this research have been properly cited and acknowledged in accordance with academic standards.

Name _____

Date _____

Signature _____