

Practices and Challenges of School Improvement Program in Waghimra Administrative Zone, Amhara Region, Ethiopia

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Abstract

The main purpose of this study was to investigate practices and challenges of school improvement program [SIP] in Waghimra Administrative Zone. Mixed methods approach with concurrent design was utilized, and data were collected from randomly selected 1,033 primary and secondary school teachers, 10 school principals, 11 woreda and zone education experts, 13 student representatives and nine Parent Teacher Student Association (PTSA) and Kebele Education and Training Board (KETB) members using questionnaire, interview, focus group discussion, and document reviews. The collected data were analyzed quantitatively using one sample t-test and one-way ANOVA and qualitatively using descriptions. The findings revealed that the planning and execution of the SIP and its domains (teaching-learning, leadership, learning environment and community participation) were low in the administrative zone with variations among woredas. Due to the lack of qualified and experienced teachers and school principals, the teaching and assessment practices were not effective. School principals' capability of planning and executing SIP was also insufficient. Most primary and secondary schools of the zone (99%) were below the expected standards. Community participation in the school affairs falls below expectation. Accordingly, continuous capacity building training on SIP, methods of teaching, assessment, curriculum development, and instructional leadership need to be provided for teachers, school principals and woreda and zone education experts. Besides, to construct standard schools and fulfill educational facilities, involving various stakeholders (governmental and non-governmental organizations and volunteer individuals and the community at large) is a timely concern.

Key words: School Improvement, Teaching and Learning, Leadership, Community Participation, Learning Environment

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Introduction

Background of the Study

Education is an instrument for development, and as a result, many nations are exerting their efforts on quality to get the best out of it (UNESCO, 2017). However, quality of education cannot be achieved easily and has been a great challenge to many countries. Since quality education is the top agenda for all countries (UNESCO, 2017), they are employing different quality school improvement programs.

In this decade, school improvement has become an expectation of all schools across many Western countries (Harris, 2002). School improvement is about strategies for improving the schools' capacity of providing quality education by focusing on students' learning outcome (Hopkins, 2001, 2005; Miles et al., 1987; Reynolds, 2010). For instance, to Miles et al.(1987) school improvement is "a systematic, sustained effort aimed at change in learning conditions and other related internal conditions in one or more schools with the ultimate aim of accomplishing educational goals more effectively" (p.3). Hopkins (2001) also viewed school improvement as a strategy for educational change that enhances student learning outcomes as well as strengthening the school's capacity for managing change. Reynolds (2010) further described school improvement as "a set of processes, managed from within the school, targeted both at pupil achievement and the school's ability to manage change" (p.146). These definitions highlight the importance of school improvement to enhance students' learning outcomes.

Successful school improvement is dependent upon the schools' ability to manage change and development and ultimately enhance students' achievement (Harris, 2002; Hopkins, 2001; Miles et al., 1987; Reynolds, 2010). Hopkins (2005) also supplemented that, SIP is recognized as the dominant approach to strengthen schools' capacity for change and to enhance quality of students' learning. Bryk et al. (2010) further demonstrate that the different components of SIP (school leadership, professional capacity, parent-community ties, a student-centered learning environment, and instructional guidance) enhance students' learning outcomes.

Similarly, in Ethiopia, in order to assure quality education in schools, the School Improvement Program (henceforth SIP) was one of the first priorities of the General Education Quality Improvement Package [GEQIP] 2008-2013 (MoE, 2007; 2010a). SIP was developed in 2007 and during its inception all primary and secondary schools developed and implemented strategic plans for a decade to improve students' results (MoE, 2007; 2010a). The SIP framework, consisting of four domains, 11 elements and 15 standards, is aimed at improving the learning outcomes of students by facilitating the teaching-learning situations, creating conducive learning environment, strengthening the participation of the society in the schools' program, and developing better leadership and management in schools(MoE, 2007;

2010a, 2015). The four domains of SIP are framed as depicted in figure 1.

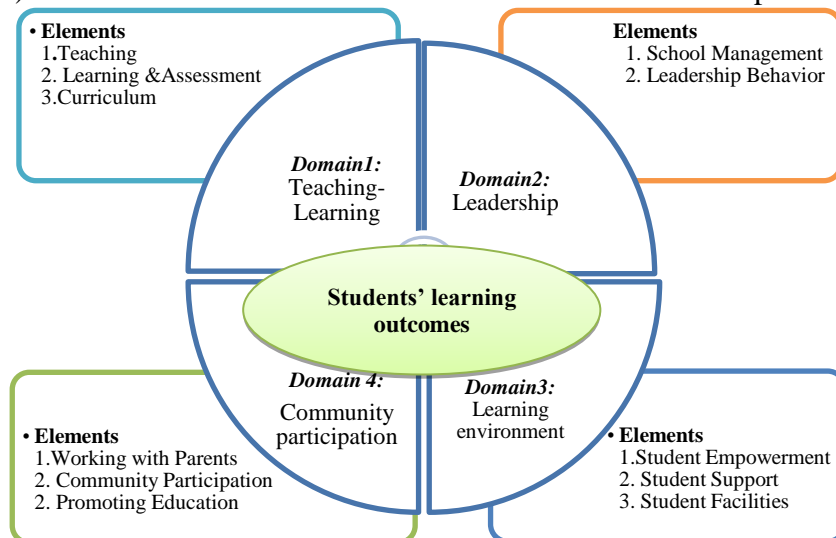


Figure 1: SIP Framework (MoE, 2010a; 2015)

Assumptions of the Framework

School Improvement Program works from the assumption that schools are most likely to strengthen their competence to give enhanced outcomes to all pupils when they adopt ways of working that are consistent with their aspirations and the current reform agenda (Hopkins, 2002). Similarly, the SIP framework of Ethiopia (MOE, 2007) was expected to satisfy the following assumptions. First, if the teaching-learning methods, assessment and curriculum development processes are effective, this can make a difference in students' learning outcomes. Second, if there is an effective leadership and teachers are well motivated, students' academic achievement will be enhanced. Third, if there is active community participation in schools, students' learning outcome will be improved. Fourth, if the learning environment of the schools is conducive, there is a possibility of maximizing students' academic triumph (MoE, 2007, 2010a, 2015).

The SIP framework also indicated that each of the four domains has different elements. For instance, the teaching and learning domain has three elements: teaching, learning and evaluation, and curriculum (MoE, 2007, 2010a, 2015). Under this domain, teachers are expected to participate in continuous professional development (CPD), use active learning methods, apply various assessment methods and use, revise and contextualize curricula. Similarly, the leadership domain consists of two elements: school management and leadership behavior (MoE, 2010a, 2015). In this regard, all teachers and school principals are expected to involve in the planning, implementation and evaluation of school activities; in exercising open and transparent leadership; in identifying the training needs of teachers; in strengthening experience sharing between the school teachers and other local schools; and in enhancing the provision of resources and technical support. The learning environment domain involves three elements: student empowerment, student support, and student facilities (MoE, 2010a, 2015). Thus, school leaders, teachers and students are expected to work together to support, motivate and empower students by creating comfortable and safe school compound and by fulfilling school facilities. The community participation domain focuses on

involving the community and parents in the schools' affairs, establishing relationships and raising awareness of the community, and promoting education to improve the students' learning outcome. The intention of this study was, therefore, to investigate how SIP and its domains were practiced in Amhara Region with a focus on Waghimra Administrative Zone.

Statement of the Problem

In Ethiopia, despite great efforts made under GEQIP and SIP, the reports of different researchers (e.g., Fekede & Fiorucci, 2012; Joshi & Verspoor, 2013; UNESCO, 2013, 2017), policy documents (MoE, 2010a; 2015) and national exam results identified gaps in the quality of education which translated into disappointing students' achievement in national learning assessments (MoE, 2015, 2017; UNESCO, 2013). For instance, the four National Learning Assessment (NLA) results in the last education sector development periods (2004, 2007, 2010, and 2012) showed low student achievement (FDRE, 2020; MoE, 2010a, 2015, 2017). This happens because the education system has not been supporting the majority of students to acquire core foundation skills and equivalent attainment to higher grades was not apparent (FDRE, 2020; MoE, 2015, 2017). Accordingly, teachers' lack of knowledge, poor teaching methods, low understanding about student diversity, inconvenient learning environment, inadequate assessment technique, low community participation, and lack of effective leadership were the main barriers for the low triumphs of students (MoE, 2010b, 2015, 2017).

In terms of propitious school environment, as the national inspection findings (MoE, 2017) revealed, 90% of schools in the country fall into the unsatisfactory category (Level 1 & Level 2). The low teacher quality and education authorities, the lack of adequate educational facilities and ineffective school improvement plan were key in contributing to the poor learning conditions (FDRE, 2020; MoE, 2017). The national and regional researches (e.g., Joshi & Verspoor, 2013; Tadesse, 2015, 2018) also showed that most teachers are not in a position to implement different active learning strategies, and classrooms remain primarily teacher-centered and continuous assessment exercises in many programs were poor. Hence, transforming poorly performing schools into schools of excellent quality in the country was a challenge (Joshi & Verspoor, 2013).

Dealing with quality education in the Amhara Region, there is also a strong variation on the performance of education among zones. Among the Amhara Region zones Waghimra Administrative Zone stood lowest in its performance in all quality measures (input, process, and output) as compared to other administrative zones of the region (REB, 2017). According to the Regional Education Bureau report (2017), out of 263 inspected schools by the REB, 261 schools (99.24%) were below the standards (164 schools at level 1 & 97 schools at level 2). It was only two schools (0.76%) that reached level 3 and no school reached level 4 (REB, 2017). As compared to all other zones of the region, Waghimra Zone had the lowest performance scores in input (9.62%), process (14.71%) and output (17.15%) scores (REB, 2017), that have direct and indirect impacts on the delivery of quality education. These major challenges triggered the present researchers to carry out this study. Accordingly, the following leading questions were raised: (1) What do the overall SIP practices in Waghimra

Administrative Zone look like? (2) To what extent were each of the four domains of SIP (teaching-learning, leadership, community participation, and favorable school environment) and their respective elements executed in the administrative zone? (3) Is there a statistically significant difference among *woredas* in the practice of SIP? (4) What were the possible challenges in executing SIP and its domains?

Scope of the Study

Geographically, this study focused on eight *woredas* of Waghemra Administrative Zone that comprise primary, secondary and preparatory schools. Conceptually, the study tried to investigate the practices of SIP and its domains (teaching-learning, leadership, community participation, and favorable learning environment) that have direct impacts up on enhancing students' learning outcomes. Within these four domains, the practices with respect to of the major elements and standards of SIP and the major impeding factors were investigated.

Literature Review

The Concept of School Improvement

Since the early 1980s, educators around the world have been facing continual and dynamic changes both in their schools and in those systems that are in support of them (Telford, 1996). As a result, many countries introduced huge reforms to their educational programs and engaged in new ways of thinking about educational problems and ways through which schools can make needed and desired improvements. One of the reforms is school improvement (Harris, 2002; Hopkins, 2005).

Hopkins (2005) viewed school improvement as a distinct approach to educational change to enhance students' outcomes as well as strengthen the school's capacity for managing improvement initiatives. Miles et al.(1987) described school improvement as a systematic and sustained effort focusing on the change of learning conditions and other similar conditions within school having the ultimate aim of realizing educational goals in more effective ways. It is targeted both at pupil achievement and the school's ability to manage change (Reynolds, 2010). These definitions highlight the importance of school improvement with its dual emphasis on enhancing the school capacity for change as well as implementing specific reforms, both of which have their ultimate goal of increasing in student achievement.

School Improvement Program in the Ethiopian Context

SIP was introduced to Ethiopia since 2007 aiming at improving students' academic achievement through creating conducive teaching and learning environment with active involvement of teachers, school leaders, students, and parents in the teaching learning process. SIP was organized around four domains all of which are geared towards students' learning outcomes. These domains are (1) teaching-learning, (2) leadership, (3) community participation, and (4) favorable school environment.

Teaching- learning

The teaching-learning domain is the heart of the SIP in the sense that all other domains work as a system to enhance the learning and teaching process so that students' achievement can be improved significantly (MoE, 2010a). Tadesse (2018) and Tomlinson et al., (2015) elucidated that effective schooling requires the use of instructional practices that enable all students to learn and develop their competencies by integrating the instruction and the curriculum with the learning environment and assessment. At the center of teaching and learning is in the pursuit of sustained school improvement in terms of students' learning outcomes (Hopkins, et al., 1994).

As schools are places where most educational policies are put into practice and teachers are the prime implementers of educational policy and strategies (Ayalew, 2009; MoE, 2015, 2017; Solomon, 2008; Tadesse, 2018), teaching demands a high degree of professional qualities and commitment (Tadesse, 2018). It has also been argued that teachers are main determinants of instructional practice and student learning outcomes (Schleicher, 2016). It is also believed that the strength of any educational system and the quality of education largely depend on the quality and commitment of its teachers (Ayalew, 2009; MoE, 2015; Solomon, 2008) since knowledgeable teachers have a powerful and long lasting influence on their diverse students' learning (Tadesse, 2018). Supporting this, UNESCO's report (2014) underscores that "an education system is only as good as its teachers" (p.3). Thus, securing the right type of teachers with -the right type of knowledge, skills and attitude is imperative (Anwar et al., 2016; Tesfaye, 2014).

On the other hand, assessment is another element of the teaching-learning domain that is used for cultivating the learner (formative assessment) (Bennett, 2011) and judging students on what and how they have learnt (summative assessment) (Wan, 2017). Although assessment informs how well students learn and how well teachers are teaching (Aytaged, 2013; Bennett, 2011; Tomlinson, 2014; Wiliam, 2011), most assessment practices were mainly 'paper and pencil tests' that cannot measure the different capabilities and skills of students in a continuous manner. Thus, to measure students' knowledge, skills and values, various assessment techniques ought to be applied with appropriate feedback (Tadesse, 2018). Cognizant of this, MoE (2017) and FDRE (2020) also suggest that teachers need to timely conduct continuous assessment, record students' results and give feedback.

The quality of the curricula also plays a great role for students' learning improvement. As curriculum and instruction are "the very heart and soul of schooling" (Slattery, 2006, p. xiv) and "the systole and diastole of schooling" (Eisner, 1993, p.38), much emphasis should be given for their link. Accordingly, the curricula to be endorsed by teachers are those that produce a better adjustment to life experiences, create social consequences and value, and foster social and personal transformation for students and society (Slattery, 2006). Changes of this magnitude necessarily require profound transformations in curriculum and instructional practices, in what and how teachers teach students (Bautista et al., 2015). However, Ethiopia's curricula [textbooks] in use at all levels lack this quality, as the FDRE (2020) contends,

...the current curricula in Ethiopia are highly theory-oriented, content focused, not including indigenous knowledge, not responding to the contextual needs of the

country, not revised timely and lack practice, not including the 21st century skills, not cultivating students with the necessary ethics and values, and not preparing students for international competitiveness (p.3).

Leadership

Bush (2010) and Hopkins (2005) considered school leadership as a critical factor that determines the success of schools. Studies indicated that the capacity of school leadership to manage change affects the improvement initiatives of schools (Cravens & Hallinger, 2012; Marsh, 2015) and realization of school improvement (Cravens & Hallinger, 2012; Pont et al., 2008). In the school improvement program, one of the key roles of leadership is establishing a clear vision for teaching-learning (Hopkins, 2002). Initiating change by providing the necessary vision and bringing about improvement in the school and involving the whole school community in schools' decisions has a great impact on the functioning of the school (Harris & Muijs, 2005; Pont et al., 2008). The ability to bring together the best team for the job is another role of school leaders since schools that have strong team are more likely to succeed in policy development and implementation (Hopkins, 2002). Pont et al. (2008) added that leadership plays a key role in improving school outcomes by influencing the motivations and capacities of teachers as well as the school environment. Hopkins (2005) also pinpointed that the cultural changes that are required for school improvement entail a transformational leadership which focuses on people involved, their relationships and require an approach that seeks to transform feelings, attitudes and beliefs.

However, in Ethiopia, even though leadership improvement initiatives as part of the overall school improvement program have been launched (MoE, 2010a) and the main roles of the school directors are identified (MoE, 2007), school principals have constraints in effective communication, monitoring and supervision (MoE, 2015). Due to the recurring problems of school leadership, the new education and training policy also states that "the school principals who are going to be assigned to lead the school should have the necessary understanding, ability and significant preparation for school leadership" (FDRE, 2020, p.61).

Community Participation

Community participation in the schools' affairs is another crucial domain of SIP. As Jeilu's (2009) survey in Amhara, Oromia, SNNPR and Addis Ababa revealed, the community supports schools by way of contributing cash for books, furniture and maintenance. Cummings and Nelsen (1997) in Getachew (2001) also stated that in difficult areas where resources are scarce and government support are unsatisfactory, community participation may be the most possible strategy for realizing the goals of SIP. Consistent to this, MoE (2010b, 2015) as well as FDRE (2020) clarified that much is expected to mobilize the community in the overall schools' affairs as schools are the property of the community.

Conducive Environment

Favorable school environment is another domain of SIP that helps to improve the academic achievement of students. According to MoE (2007) as well as FDRE (2020), the safe and healthy school environment with sufficient infrastructure and educational facilities such as classrooms, textbook, references, libraries, science kits, laboratory chemicals, sport materials, plasma TVs, and ICT centers can facilitate students' learning.

Method

Design

For this study, mixed methods approach with concurrent mixed methods design was employed. The complementary nature of using both quantitative and qualitative research approaches made the mixed methods approach preferable (Creswell, 2014; Miles et al., 2014). The quantitative approach was used to generate data through a questionnaire from a wide number of sources (Gay et al., 2009). Questionnaire was used to investigate the practices of SIP at Waghimra Zone primary, secondary and preparatory schools. On the other hand, qualitative approach was employed to get in-depth information from participants' experiences, feelings, and beliefs (Miles et al., 2014) about the topic under discussion. Hence, qualitative data were collected via interview, focus group discussion (FGD), and document reviews to make in-depth investigations on the practices of SIP by teachers and school principals.

Data Sources and Sampling Techniques

This study was conducted in Waghimra Administrative Zone primary, secondary and preparatory schools. In this zone, there are eight *woredas* that include a total of 289 schools (264 primary and 25 secondary & preparatory schools) with a total of 5,157 primary school teachers (2,825 males and 2,332 females) and 674 secondary and preparatory school teachers (551 males and 123 females) (Waghimra Zone Education Department Office, 2018).

For this survey, all *woredas* were selected through comprehensive sampling whereas from all the *woredas* 20% (52 primary schools) and 50% (13) secondary and preparatory schools were selected through simple random sampling. From these schools a total of 1,163 teachers were randomly selected and participated in the study. Out of these 128 teachers did not properly fill in the questionnaires or failed to return hence excluded from analyses. Besides, ten school principals (directors & supervisors) and eleven *woreda* and zone education experts were selected as samples through purposive sampling technique. Thirteen student representatives, nine Parent Teacher Student Association (PTSA) and Kebele Education and Training Board (KETB) members and eight student representatives also participated through available sampling.

Instruments

The major data gathering tools were questionnaire, interviews, FGD, and document reviews.

Questionnaire

Both close-ended and open-ended questionnaires were adapted from SIP framework (MoE, 2010a) and used to gather data. The five Likert scaled close-ended items helped to assess the practices of teachers and school principals on SIP and its domains whereas, the open ended items helped to identify major factors affecting the practices of SIP.

Interviews and Focus Group Discussions

Semi-structured interviews were employed to investigate teachers' and school principals' understandings and practices of SIP and its domains. Twelve teachers, ten school principals (principals and supervisors), eight *woreda* education officers, three zone education department officers, 13 students, six PTSA members and three KETB leaders were interviewed, and tape-recorded based on their consent. Focus group discussions (FGDs) were also employed to get shared understandings of participants and to triangulate the collected data on SIP from individual respondents. Hence, six groups of teachers and department heads and two groups of school principals that consist of 4-6 members were discussants. FGDs were also tape-recorded based on the consent of participants.

Document Reviews

Document such as continuous professional development (CPD) portfolio of teachers, SIP yearly and quarterly plans and performance evaluation reports, teacher-made annual plans and daily lesson plans, and continuous assessment forms were reviewed in order to corroborate data gathered through other data gathering tools.

Techniques of Data Analysis

For this study, both quantitative and qualitative data analysis techniques were employed. Quantitatively, percentage, mean, standard deviation, one sample t-test and one-way ANOVA were employed. One sample t-test was used to determine the practices of SIP. Moreover, comparisons were made between and within groups using one-way ANOVA to examine differences among *woredas* in their practices of SIP. As a conventional standard degree of significance (Creswell, 2014; Gay et al., 2009), five percent ($\alpha = 0.05$) is taken as a standard level of significance throughout the study.

On the other hand, the data collected through interviews, FGD and document reviews were analyzed qualitatively. The collected data were categorized into themes drawing on similarities of responses based on which thematic analyses were made supported with descriptions and narrations (Bryman, 2012; Miles et al., 2014). The data collected via interviews and FGDs were transcribed verbatim. From the transcribed conversations, patterns of experiences were listed in the form of direct quotes or by paraphrasing common ideas.

Instrument Validity and Reliability

The validity and reliability of the questionnaire was checked using different mechanisms. Firstly, content validity was deliberated to make the instruments as fair and

exhaustive as possible in relation to the context of a study. Secondly, the questionnaire was reviewed by colleagues; their feedbacks were gathered and utilized. Thirdly, the questionnaire was translated into Amharic by a language expert and backward translations were also made. To check reliability (internal consistency), the questionnaire was pilot tested in the non-sample primary and secondary schools of Waghimra involving 60 participants (teachers) and the Cronbach alpha was computed as .93.

The trustworthiness, authenticity, and credibility of the qualitative instruments were also attained through various validity strategies. The transcripts from the interviewees and focus groups were checked and inter-coder agreement was used to cross-check the accuracy of the codes. Data integration was made during analysis for confirmation, corroboration or cross-validation within a single study. Finally, accuracy of the findings was corroborated through member-checking and findings were conveyed through the use of thick descriptions.

Results

This section focuses on data presentation and results of data. It includes description of the demographic variables of respondents followed by presentation of the research results.

Participant Characteristics

This part comprises of *woredas*, and sample teachers in terms of gender, training program, level of teaching, and teaching experience.

Table 1

Characteristics of the sample participants

Variables	Participants (N=1035)		Responses		Variables	Participants (N=1035)		Responses			
	Frequency	Percent	Frequency	Percent		Frequency	Percent	Frequency	Percent		
<i>Woredas</i>	Sekota Town	159	15.4	Qualification	Certificate	26	2.5	Teaching experience	0-5 years	445	43.0
	Sekota Zuria	120	11.6		Diploma	636	61.4		6-10 years	310	30.0
	Dahna	170	16.4		Degree	357	34.5		11-15 years	231	22.3
	Zequala	133	12.9		Masters	16	1.7		16-20 years	21	2.0
	Gazgibela	137	13.2				>20 years		28	2.7	
	Sahela	102	9.9								
	Aberegele	111	10.7								
	Tsagbji	103	10.0								
Gender	Male	659	63.7	Level of teaching	Primary	716	69.2				
	Female	376	36.3		Secondary	225	21.7				
					Preparatory	94	9.1				

As presented in Table1, in all sample *woredas*, 716 (69.2%) primary school teachers, 225 (21.7%) secondary school teachers and 94 (9.1%) preparatory school teachers participated in the study. Out of these, 659 (63.7%) were males and 376 (36.3%) females. In terms of qualification, 636 (61.14%) and 357 (34.5%) of teachers were diploma and degree holders, successively, whereas, 26 (2.5%) were certificate graduates and 16 (1.7%) had master's degree. In terms of experience, 445 (43%), 310 (30%), 231 (22.3%), 21 (2%) and 28 (2.7%) of teachers had 0-5, 6-10, 11-15, 16-20 and >20 years of teaching experience, respectively.

Results

The Practice of SIP in Waghimra Administrative Zone

As compared to the expected mean (3.0), the one sample t-test results in Table 2 showed that teachers' and principals' SIP practice (Mean=2.602) was low ($t=-9.193$, $df=1032$, $p=.000$). Moreover, the teaching-learning (Mean= 2.909), school leadership (Mean= 2.909), school environment (Mean=2.685), and community participation (Mean=2.704) practices were also found to be low as compared to the expected mean (3.0).

Table 2

One sample t-test on the practice of SIP (n=1033)

1. SIP domains	N	EM	OM	SD	df	t	p
Overall practice of SIP	1033	3.0	2.802	.6792	1032	-9.193	.000
Teaching-learning domain	1033	3.0	2.909	.839	1032	-3.452	.001
School leadership domain	1033	3.0	2.909	.8542	1032	-3.406	.001
Conducive environment domain	1033	3.0	2.683	.7438	1032	-13.607	.000
Community Participation domain	1033	3.0	2.704	.8889	1032	-10.645	.000

Teachers' and school principals' practices of SIP across the eight *woredas* were also compared using one-way ANOVA. The result in Table 3 showed that there is a statistically significant mean difference among the eight *woredas* ($(F_{7, 994}) = 12.270$, $P < .05$).

Table 3

One-way ANOVA on the practice of SIP in woredas of Waghemra zone

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	34.483	7	4.926	12.270	.000
Within Groups	396.271	987	.401		
Total	430.753	994			

Following the significance main effects test pairwise comparisons were conducted using the Tukey Post Hoc analysis. The results in Table 4 clarified that Sekota Zuria *Woreda* (Mean=3.006), Sekota town (Mean=2.897) and Gazgibela (Mean=2.816) had relatively better practice of SIP. In contrast, Tsagebji (Mean=2.407), Abergelle (Mean= 2.528), Sahela (Mean=2.538), and Zequala (Mean=2.615) had lower practices of SIP.

Table 4

Mean comparisons of woredas on the practice of SIP using Tukey Post Hoc Analysis

	Woreda (J)	N	Mean	Mean Difference (I-J)	Sig.
Woreda (I)	Sekota town	158	2.897	.11389	.848
	Gazgibela	133	2.816	.19197	.219
Sekota Zuria (n=117) m=3.006	Dahna	169	2.814	.39073*	.000
	Zequala	137	2.615	.18999	.000
	Sahela	111	2.538	.46762*	.000
	Abergelle	102	2.528	.47788*	.000
	Tsagebji	103	2.407	.59824*	.000

On the other hand, the qualitative description revealed a low practice of SIP. For instance, the following is a quotation extracted from the interview transcript of the zone Education Department Teachers, Directors and Supervisors' [TDS] coordinator.

SIP is not properly implemented in the zone. Many school principals were simply preparing 'fake' SIP plans by copying someone's work and reporting to the *woreda* education office. Hence, our evaluation currently shows that SIP is not being properly practiced in our zone and *woredas* (TDS1, 12/03/2019).

Another interviewee, the zone Education Department Natural Science Expert, also mentioned that "nowadays due to high turnover of trained experts on SIP and lack of proper follow up and training, there is no effective planning and execution of SIP." The expert supplemented: "before planning SIP, prior tasks (pre-assessment, collecting need assessment data, prioritizing needs, and discussing with stakeholders) were not done properly." The FGD responses of Gazgibla *Woreda* TDS coordinators and Abergele and Sahela *Woreda* education experts were the same. For instance, the Abergele *Woreda* education expert elucidated that,

In Waghimra Zone, the focus given to SIP this time is very low. Every year, those many new school principals assigned in the zone are without the necessary awareness and training on how to plan and implement SIP. This highly affects the practice of SIP in our *woredas*. (WEE1, 17/03/2019).

In the same vein the Gazgibla and Sahla *Woreda* education experts replied, "the major focus of many school principals and supervisors was copying the other school SIP plans and reporting to *woreda* education offices." The document reviews of SIP also confirmed this reality. Similarly, the Sahela *woreda* education expert and the Sekota Zuria *Woreda* professional licensing expert added "in SIP planning different stakeholders (teachers, students, parents, PTSAs, KETB members, etc) did not participate due to principals and *woreda* education experts' knowledge and skill gaps." The interview results of PTSA members and student representatives also confirmed that their involvement in SIP planning was almost negligible and it was only the principal[s] who prepared the plan or brought the already prepared plan from other schools. Both primary and secondary school teachers from Sahela and Zequala *Woredas* reflected the same idea. (T4, T7, 20/03/2019).

Regarding the low practice of SIP, the zone TDS coordinator explained, the lack of knowledge and skills of planning SIP" as "the majority of the school principals are inexperienced with no leadership training." The Sekota Zuria secondary school principal also added "lack of incentives in schools for PTSA and KETB members affect their participation in the planning of SIP." The interview respondents from various *woredas* (Dahna, Gazgibla, Tsagbji, Abergelle and Sahela) also replied the same. Their responses indicated that SIP was not executed properly as many school principals were not knowledgeable, trained, committed and skillful.

Results in the Practice of SIP Domains

The Teaching-learning Domain of SIP

A look at the one sample t-test results in Table 5 indicates that the practice of Waghimra Zone teachers and school principals in the teaching-learning domain (Mean=2.909) was low, as compared to the expected mean (in this case 3.0) ($t=-3.452$, $df=1032$, $p=.001$). Moreover, their performances on teaching and learning (Mean=2.986), curriculum (Mean=2.895) and assessment practices (Mean=2.895) were low.

Table 5

One sample t-test on the practice of teaching-learning domain (n=1033)

1.Teaching-learning domain	N	EM	OM	SD	df	T	p
Overall teaching-learning domain	1033	3.0	2.909	.8385	1032	-3.452	.001
✓ Teaching and learning	1033	3.0	2.986	.954	1032	-.446	.625
✓ Curriculum	1033	3.0	2.763	1.009	1032	-7.540	.000
✓ Assessment practices	1033	3.0	2.895	1.016	1032	-3.333	.001

Note. EM= Expected Mean, OM=Observed Mean, SD= Standard Deviation, df= Degree of Freedom

The qualitative data with respect to the teaching and learning domain lend support to the one sample t-test results. Commenting on the teaching learnin process, one of the cluster center supervisors from Zequala *Woreda* said:

Most teachers, especially newly employed teachers, lack the skill of planning, and have pedagogical content knowledge (PCK) deficit and limitations in applying various assessment techniques. Even, some of the newly employed teachers do not want to teach their subject they are trained for and are unable to prepare standard exams for the subject. Similarly, some experienced teachers are not motivated, committed and not updating their teaching and assessment practices. SU2, 15/03/2019).

The responses of a Zequala *woreda* supervisor, the zone TDS coordinator, Dahna and Gazgibla, and Sekota Town *woreda* experts, primary and secondary school principals and students on the teaching-learning and assessment practices of teachers in the zone had similarities. For instance, the zone TDS coordinator said "...teachers have limitations in pedagogy and subject matter mastery. They have also gaps in adapting the lessons practically in to the contexts of the local areas. In classroom teaching, formative assessment is almost negligible." On the same token, one of the student interviewees provided similar responses as the zone TDS coordinator stating "many teachers are incompetent both in their subject matter and pedagogy mastery." Similarly, Sekota Town *woreda* education expert complemented :

...it is uncommon to see teachers engaged in implementing active learning, reviewing and contextualizing curricula and applying formative continuous assessment. While the method of teaching dominantly applied by most teachers was lecture method the assessment method is often limited to paper and pencil tests (WEE5, 13/03/2019).

As the expert added,

There was a knowledge and skill gap on the side of teachers in contextualizing the lessons they are providing. They do not adequately

integrate their instruction with life and prior experiences of the learner. They also do not review curriculum [textbooks] every time. (WEE5, 13/03/2019).

Other interviewees of different *woredas* and the zone education department also replied that teachers' practice of continuous assessment is very low due to input factors like teachers' limited knowledge of assessment, large class size mainly in secondary schools (about 80 students in one classroom), and high student-textbook ratio. Similarly, the zone TDS coordinator reported "formative assessment was practiced well and most assessment practices were mainly for grading purpose. As a result, students' learning was not improved." He also added that instead of focusing on the intended academic objective, "grades [marks] were given for attendance and personal hygiene."

Similar to the responses of various participants on the poor continuous assessment practices, reviews of documents such as student assessment formats, checklists and grade reports indicate the fact that the assessment types were 'paper and pencil tests' and exams. An assessment result for attendance is also obtained as one criterion. But, those skill and attitude measuring assessment practices were uncommon in the documents reviewed. This revealed that measuring the whole personality quality of a student (knowledge, skills and values) is a challenge.

In relation to curriculum evaluation also, the secondary school principal interviewee elucidated that "teachers are requested to review the textbooks they are teaching every year, but the request was without the necessary curriculum revision and evaluation know-hows and skills." The zone education department and *woreda* education experts replied "we are asking teachers to evaluate textbooks, but there is no single course given about curriculum evaluation for them during their college or university training," As a result, "teachers simply try to evaluate the textbooks to fulfill the mandatory performance efficiency without the necessary knowledge and skill of curriculum evaluation."

To investigate mean score differences among *woredas* in the practice of the teaching learning domain, one-way ANOVA was employed and the result in Table 6 indicated that there is a statistically significant difference in teaching and learning, curriculum and assessment practices among the eight *woredas* ($(F_{7, 1029}) = 25.233, P < 0.05$).

Table 6

One-way ANOVA on the teaching-learning domain in woredas

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	106.629	7	15.233		
Within Groups	616.955	1022	.604	25.233	.000
Total	723.583	1029			

The data also revealed that there is a mean score difference among *woredas*. The Tukey Post Hoc analysis result in Table 7 clarified that Sekota town (Mean=3.281), Sekota Zuria (Mean=3.228) and Dahna (Mean= 3.131) had relatively better teaching, curriculum revision and assessment practices. In contrast, Tsagebji (Mean=2.207) has the lowest practice followed by Sahela (Mean=2.655), Abergele (Mean=2.681), Zequala (Mean=2.810) and Gazgibela (Mean= 2.938) *Woredas*, respectively.

Table 7*Mean comparisons of woredas using Tukey Post Hoc Analysis*

	Woreda (J)	N	Mean	Mean Difference	Sig.
Woreda (I)	Sekota zuria	117	3.228	.05268	.999
	Dahna	169	3.131	.15018	.656
Sekota town (n=158) M=3.281	Gazgibela	133	2.938	.34322*	.004
	Zequala	137	2.810	.47093*	.000
	Abergele	102	2.681	.60009*	.000
	Sahela	111	2.655	.62644*	.000
	Tsagebji	103	2.207	.07377*	.000

School Leadership Domain in School Improvement Program

The one sample t-test results in Table 8 revealed that the overall leadership practice of school leadership in the zone was low ($m=2.909$) compared to the expected mean (3.0) ($t=-3.406$, $df=1032$, $p=.001$). Moreover, the practice of school principals in the two components of the leadership domain: school leadership administration (Mean=2.894) and school leadership behavior (Mean=2.929) was below the expected mean.

Table 8*One sample t-test on the practice of leadership domain (n=1033)*

2. School Leadership domain	N	EM	OM	SD	df	t	p
Overall School Leadership Practice	1033	3.0	2.909	.85418	1032	-3.406	.001
✓ School Leadership administration	1033	3.0	2.894	.87617	1032	-3.894	.000
✓ School Leadership Behavior	1033	3.0	2.929	.97931	1032	-2.335	.020

The qualitative data collected from respondents also elucidated that leadership effectiveness is one major problem to plan and implement SIP. Regarding the support given to the school, teacher and student interviewees and FGD participants replied that both *woreda* education experts and school principals (directors and supervisors) did not provide the necessary support to schools, teachers and students. These respondents added that, specifically, school supervisors did not have the capacity and readiness to support schools. Consistent to the above ideas, the *woreda* TDS coordinator confirmed that “majority of school supervisors do not provide effective support services to schools due to their knowledge gaps. But they usually go to school for ‘inspection’ purposes.” Similarly, the report of many participants point to the fact that many of the *woreda* education experts and school supervisors do not observe schools and give any professional support throughout the year. As a result, schools and teachers did not benefit to the maximum from the professional support expected from the *woreda* and zone experts as well as from school principals.

The qualitative data finding also indicated that since school principals and supervisors lacked instructional leadership knowledge and skill, the support they gave to schools and teachers was weak. They had limitations to engage PTSA and KETB members to plan and implement SIP. The respondents believed that the recruitment, selection and training and development of educational leaders in the zone and *woreda* education offices have

contributed for the problem. In this case, the responses of zone TDS and woreda education experts explicated that assignment of school principals in most schools and *woreda* education offices was not ‘merit’ and experience based. Many principals were assigned as school heads without fulfilling the necessary requirements of leading and without their interest. (WEE8, 17/03/2019).

On the other hand, the surrounding community in the zone had good participation in supporting schools and building classrooms. For this, some school principals showed best practices in mobilizing the community. The zone TDS coordinator responded that, “... under difficult working environment, there were a few school leaders who tried to construct classrooms and fulfill school facilities by generating income from different sponsors and by mobilizing the surrounding community.” (TDS1, 12/03/2019). In contrast, many school principals were not as such active in mobilizing the community and other stakeholders. Due to lack of participatory decision-making in the schools’ situation, the involvements of teachers, students and parents in the schools affairs were insignificant. A school supervisor in Sekota town reported the same problem. Yet, as various literatures indicate, an effective school principal is the master weaver of a complex tapestry of school relationship and the quality of the schools is heavily dependent on the school principals.

In order to see the differences in leadership practices among the different *woredas*, one way ANOVA was run. As depicted in Table 9 a statistically significant difference was obtained ($F_{7, 1015} = 7.897, P < 0.05$).

Table 9

One-way ANOVA on Leadership domain in woredas of Waghemra Zone

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	38.501	7	5.500		
Within Groups	702.061	1008	.696	7.897	.000
Total	740.562	1015			

Even though the overall practice of school leadership in the zone is generally low, there is a wider disparity among *woredas*. The Tukey Post Hoc analysis employed in Table 10 showed that Sekota town ($m=3.272$), Dahna (Mean=3.028), Sekota Zuria (Mean=3.012) and Gazgibela (Mean=2.989) had relatively better leadership practices compared to Abergele (Mean=2.644), Tsagebji (Mean=2.666), Zequala (Mean=2.738) and Sahela (Mean=2.799) *woredas*.

Table 10

Mean comparisons of woredas using Tukey Post Hoc Analysis on leadership

	Woreda (J)	N	Mean	Mean Difference (I-J)	Sig.
Woreda (I)	Dahna	169	3.028	.244	.244
	Sekota town	158	3.012	.259	.194
Sekota Zuria (n=117)M=3.272	Gazgibela	133	2.989	.284	.148
	Sahela	111	2.799	.472*	.001
	Zequala	137	2.738	.533*	.000
	Tsagebji	103	2.666	.605*	.000
	Abergele	102	2.644	.628*	.000

Community Participation in SIP

As regards community participation, the one sample *t*-test in Table 11 unveiled that the practice of community participation in schools of Waghemra Zone was low (Mean=2.70) ($t=-10.645$, $df=1032$, $p=.000$). Similarly, the two elements: community participation (Mean=2.49) and working with parents (2.73) were also low. However, the third element, promoting education, seemed to be executed at average level ($m=3.00$).

Table 11

One sample t-test on the practice of community participation domain (n=1033)

3. Community participation domain	N	EM	OM	SD	df	t	p
Overall community participation	1033	3.0	2.70	.8889	1032	-10.645	.000
Community Participation	1033	3.0	2.49	.9744	1032	-16.819	.000
Promoting Education	1033	3.0	3.00	.9780	1032	.064	.949
Working with Parents & Community	1033	3.0	2.73	.9903	1032	-8.648	.000

Note. EM= Expected Mean, OM=Observed Mean, SD= Standard Deviation, df= Degree of Freedom

The qualitative data obtained from different respondents confirmed the participation of the community in the schools' affairs. As the zone TDS coordinator's response revealed,

The community's contribution (in kind or cash) to their schools is highly appreciated. Almost all satellite schools and the majority of regular classes (grades1-8) and high schools were built by the community. But the constructed schools from wood and grass are below the standards, that can easily be collapsed by termites. (TDS2, 13/03/2019).

Similarly, the interview results of the school principals and two of the KETB and PTSA members from Sekota Zuria replied that the community's involvement in constructing schools, paying salary for the guards and administrative workers and building houses for teachers was great. These participants stated that some of the community members kept their schools sacred like religious institutions. Sahela, Tsagbji, Sekota Zuria, Abergele, Gazgibela and Zequala *woreda* education experts also reported that "the community did not have a problem in contributing their labor to build schools." Nevertheless, many of the interview results showed that parents were not committed to discuss with teachers on their children's learning; instead, most of them preferred to use their children's labor. That is why 'shift absenteeism' was a common practice in the zone.

Conducive School Environment as a Domain of SIP

The result of one sample *t*-test in Table 12 revealed that the school environment at all levels of schools was not conducive (Obtained Mean=2.683, $t=-13.607$, $df=1032$, $p=.000$). The status of student empowerment (Mean=2.782), student support (Mean=2.911) and student facilities (Mean=2.487) were also low.

Table 12*One sample t-test on the practice of creating favorable school environment*

4. Conducive School Environment	N	EM	OM	SD	df	t	p
Overall School environment domain	1033	3.0	2.683	.7438	1032	-13.607	.000
✓ Student Empowerment	1033	3.0	2.782	.7836	1032	-8.951	.000
✓ Student Support	1033	3.0	2.911	.8783	1032	-3.268	.001
✓ Student Facilities	1033	3.0	2.487	.9526	1032	-17.222	.000

In order to see the presence of significant mean differences among eight *woredas*, one way ANOVA was computed and the results are presented in Table 13. Table 13 unveiled that there is a statistically significant mean difference among the eight *woredas* in the conduciveness of the school environment ($F_{7, 1018} = 7.164, P < 0.05$).

Table13*One-way ANOVA on conducive environment domain in Woredas of Waghimra Zone*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	26.618	7	3.803	7.164	.000
Within Groups	536.608	1011	.531		
Total	563.226	1018			

The Tukey Post Hoc analysis result in Table 14 indicated that Sekota zuria (Mean=2.9423), Gazgibela (Mean=2.8736) and Sekota Town (Mean=2.7866) *woredas* had relatively better conducive school environments as compared to Tsagebji (Mean= 2.449), Abergele (Mean= 2.487), Sahela (Mean=2.559), Zequala (Mean=2.599) and Dahna *woredas* (Mean=2.672).

Table14*Mean comparisons on conducive environment using Tukey Post Hoc Analysis*

	Woreda (J)	N	Mean	Mean Difference	Sig.
Woreda (I)	Gazgibela	133	2.874	.06872	.996
Sekota Zuria (n=117) M=2.942	Sekota town	158	2.787	.15574	.652
	Dahna	169	2.672	.27013*	.041
	Zequala	137	2.599	.34264*	.005
	Sahela	111	2.559	.38375*	.003
	Abergellele	102	2.487	.45558*	.000
	Tsagebji	103	2.449	.49239*	.000

The majority of the respondents to the qualitative data gathering tools disclosed that many of the schools in the administrative zone were not conducive. As revealed by the interviews held with primary and secondary school principals, most schools did not have *quality* buildings and had no libraries and laboratories, pedagogical centers, and required infrastructures like power supply and pure water and adequate budget. Hence, conducting lessons through ICT and plasma TV is a challenge. As many schools are in drought prone areas, students are supported by school feed programs. The situation was much worse in Tsagebji, Abergele, Sahela, and Zequala *woredas* where many schools were made of wooden and grass shelters and under the shed of the trees with no chairs and tables. In the schools of

those *woredas*, students commonly sit on stone in the dusty, windy and sunny classrooms that are not safe and conducive.

Factors Affecting the Execution of SIP

Qualitative data were also collected from the sample *woredas* using open-ended questionnaire, interviews and FGDs on the major factors affecting the execution of SIP. The collected data were grouped and analysed thematically as teacher related, leadership related, school environment related, community related and student related factors.

Teacher related factors: To make teaching-learning effective, giving due emphasis to teachers' recruitment, training and licensing is vital. According to the various respondents' interview results, poor quality of teachers with no sufficient pedagogical content knowledge (PCK), high turnover of qualified and experienced teachers, low commitment and interest of teachers for teaching and the profession, problem of producing qualified and competent teachers from teacher training institutions mainly in the “*generalist*” versus “*specialist*” training modalities for primary education and in applied fields for secondary education, employing unqualified teachers, and shortage of qualified teachers in the fields of business, economics, IT, mathematics and science were teacher related factors affecting the practices of SIP.

Leadership related factors: The collected qualitative data from various participants showed that the majority of school principals did not have the necessary qualification in the field of leadership. The lack of strategic, visionary and far-sighted school leaders, wider knowledge gap of school principals and *woreda* and zone education experts in instructional leadership, problems in utilizing the block-grant budget for the intended purpose, poor community mobilization, poor planning skill, and lack of commitment and devotion to work for their schools to the outmost were leadership related challenges.

School environment related factors: As the document reviews and interview results revealed, the majority of schools in the administrative zone were below the standards, which are not favorable for the teaching-learning process. The lack of standard school buildings (as 99% schools are below the standards) (REB, 2017), shortage of resources such as chairs and tables, computers, libraries and laboratories, shortage of electricity and pure water, shortage of educational facilities such as textbooks, teachers' guide, syllabuses and reference books, and inaccessibility of several schools that have very hostile climate with no water and rugged topography were among the school environment factors.

Community related factors: The participation of the community and parents in the schools affairs and in their children's learning is crucial. However, different interviewees and FGD participants replied that the low parental involvement in students' learning, student absenteeism and/or ‘*shift absenteeism*’ - sending children alternately – and low achievement of students were common practices in the zone.

Student related factors: According to the responses of teachers and school principals, student dropout or absenteeism (mainly in hot climate areas), lack of commitment, courage and determination to learn due to search for other daily labour jobs and lack of interest to learn as many graduated students in their surroundings were not employed, and misbehavior of students in and outside classrooms were identified as student related challenges.

Discussion

This part of the study deals with discussion of results in light of the research questions raised. As part of quality education improvement reforms, the school improvement program (SIP) was introduced (MoE, 2007, 2010a) and executed in primary and secondary schools of the country in order to improve the quality of students' learning outcome (MoE, 2010a, 2015). However, the findings of this study revealed that the Waghimra Zone schools' overall practice of SIP and its domains (teaching-learning, leadership, community participation and favourable school environment) was low.

With regard to the teaching-learning domain which is the heart of the SIP, teachers are expected to be professionally competent and use active learning methods, use assessments with remediation, and understand and use curriculum. However, the majority of the sample teachers did not implement active learning and use various continuous assessment strategies. They also had limitations in curriculum revision and practice so as to improve students' learning. Various authors revealed that the centrality of teaching and learning is in the pursuit of sustained school improvement in terms of students' learning outcomes (Hopkins, *et al.*, 1994). Besides, Tadesse (2018) and Tomlinson et al. (2015) elucidated that effective schooling requires the use of instructional practices that enable all students to learn and develop their competencies by integrating the instruction and the curriculum with the learning environment and assessment. For this to happen, quality teachers are mandatory.

Schools are places where most educational policies are put into practice and teachers are the prime implementers of educational policies and strategies (Ayalew, 2009; MoE, 2015, 2017; Solomon, 2008; Tadesse, 2018). It has also been shown that teachers are main determinants of instructional practice and student learning outcomes (Schleicher, 2016) and hence, teaching demands a high degree of professional qualities and commitment (Tadesse, 2018). Anwar et al. (2016) also opined that "securing the right type of teachers with right type of knowledge, skills and attitude" (p.291) is imperative. However, many primary and secondary school teachers in Waghimara zone are not well qualified, competent, experienced, and committed to their profession. The situation gets worse in remote *woredas* such as Tsagbji, Abergele, Sahela and Zequala. In the zone, many primary school teachers are employed as teachers before they graduate from teacher education colleges what Tesfaye (2014) called "para-professionals" (p.23). Thus, it seems partly due to this, Waghimra Zone students' academic attainment at all levels was the least compared to other zones of the Region (REB, 2017).

The studies of Shulman (1987), Huisheng (2007), and Osguthorpe (2008) unveiled that the professional competence of teachers, which includes subject matter knowledge, knowledge of pedagogy and curricular knowledge, is one of the factors that contribute to the quality of teaching. However, many teachers of the administrative zone have pedagogical content knowledge (PCK) deficit, which is congruent with the research results of Aschalew (2012), Birhanu (2010), Ministry of Education (2009, 2010, 2015, 2017), Tadesse (2018) and Tesfaye (2014). The strength of any educational system and quality education largely depends on the quality and commitment of its teachers (Ayalew, 2009; MoE, 2015; Solomon, 2008) and knowledgeable teachers have a powerful and long lasting influence on their diverse students' learning (Tadesse, 2018). But many teachers in Waghimra Zone were not

using different active learning strategies that exposes learners to develop critical thinking skills and problem solving abilities.

Assessment is another element of the teaching-learning domain that informs how well the students learn and how well the teachers teach (Aytaged, 2013; Bennett, 2011; Tomlinson, 2014; Wiliam, 2011). Nonetheless, various assessment practices were not implemented in many schools of Waghimera Zone. Most assessment practices were mainly 'paper and pencil tests' that cannot measure the different capabilities and skills of students in a continuous manner. The research results of Abiy (2013), Bennett (2011), and Tadesse (2018) are consistent with this finding. Hence, to measure students' knowledge, skill and values, various assessment techniques ought to be applied with appropriate feedback (FDRE, 2020; MoE, 2017; Tadesse, 2018).

On the other hand, the quality of the curricula also plays a great role for effective teaching. Curriculum and instruction are highly interwoven as Slattery states "they are the very heart and soul of schooling" (Slattery 2006, p. xiv). But as this finding revealed, teachers' proper understanding, use and revision of the curricula were the major problem in the zone. In order to enhance students' learning, the appropriate curriculum needs to be competence-based and activity-oriented and enhance critical thinking and problem solving skills. Nevertheless, the currently utilized curricula [textbooks] of Ethiopia lack this quality, as the FDRE (2020) contends, "the current Ethiopian curricula are highly theory-oriented, content focused, lack indigenous knowledge, not responding to the contextual needs of the country, not involving the 21st century skills, not cultivating students with the necessary ethics and values and preparing them for international competitiveness" (p.3).

In the leadership domain, studies indicate that the capacity of school leadership to manage change affects the improvement initiatives of schools (Cravens & Hallinger, 2012; Marsh, 2015) and attainment of school improvement (Abbott, 2015; Cravens & Hallinger, 2012; Pont, Deborah & Hunter, 2008). In schools where leadership is participatory, the school community is engaged in the planning and execution processes suggesting that school leadership is a critical factor that determines the success of schools (Bush, 2010). Moreover, Pont et al. (2008) states that hat leadership plays a key role in improving school outcomes by influencing the motivations and capacities of teachers. However, the present study revealed that many of the school principals have limitations in their management and leadership behavior, in effective communication, monitoring and supervision, and in decision making roles. Earlier Ministry's program evaluation documents (MoE, 2005, 2010b, 2015) also indicated such weaknesses in supervision, leadership, management and operation capacity especially at the levels of *woredas* and schools.

To realize the ambition of improved schools and student achievement, schools need to exercise a shared, teamed and democratic form of leadership (Harris & Muijs, 2005; Pont et al., 2008). To make schools effective, school leaders [principals] are viewed as holding the key to resolving a number of the problems currently facing schools and this has led to a major investment in the preparation and development of school leaders (MoE, 2015). The new education and training policy also revealed that "the school principals who are going to be assigned to lead the school must have the necessary understanding, ability and significant preparation for school leadership" (FDRE, 2020, p.61).

Regarding community participation, Waghimra Administrative Zone's community engagement in constructing schools by contributing labour and cash was encouraging. As the finding also revealed, most schools in the zone are constructed by the community, although they are wooden and grass-made schools with short-ages. Referring community participation, Jeilu (2009) stated that the community supports schools through cash contributions for books, furniture and maintenance with a sense of ownership over their schools. In contrast, parents' engagement and promotion in their children's learning was low in Waghimra Zone. Many parents desire exploiting their children's labor more than sending them to school by practicing a shift absenteeism system – sending one child one day and abstaining another in the same day. The engagement of assigned PTSA and KETB members in schools' decision making was not also significant. In line with this, the Ministry's (2010b, 2015) report as well as FDRE (2020) also clarified that much is expected to mobilize the community in the overall schools' affairs as schools are the property of the community.

With regard to the favourable school environment domain, the finding of this study revealed that almost all schools (164 schools at level 1 and 97 schools at level 2) are below the standards. Congruent to this, the Waghimra Education Department (2018) report as well as the Regional Education Bureau report (2017) confirmed that out of 263 inspected schools by the REB, 261 schools (99.24%) were below the standards. These schools did not have standard buildings, laboratories, libraries, and other related resources. Under this circumstance, expecting quality education is ridiculous. Hence, it calls for the attention of the government and other stakeholders.

The execution of SIP in *woredas* of Waghimra Administrative Zone was highly challenged by a number of teacher related, leadership related, community related and environment related factors. The poor quality of teachers in pedagogical content knowledge (PCK), high turnover of qualified and experienced teachers, low commitment and interest of teachers for teaching and the profession were teacher related factors affecting the execution of SIP. Similarly, the majority of school principals did not have the necessary qualification in the field of leadership and assignment of them was not merit-based. Thus, lack of strategic and visionary school leaders, wider knowledge gap of school principals and *woreda* and zone education experts in instructional leadership, poor community mobilization, and poor planning skill were leadership related challenges. In terms of school environment, the majority of schools (99%) were below the standards that are not favorable for the teaching-learning process (REB, 2017). Accordingly, lack of standard school buildings, shortage of school resources and educational facilities, and hostile climate with no water and rugged topography were among school environment factors. Similarly, unlike constructing schools, the participation of the community and parents in their students' learning was low. As a result, low achievement and student absenteeism were common problems.

Conclusions and Implications

The findings of this study revealed that the overall practice of SIP by different actors of Waghimra administrative zone was not effective. In terms of the teaching-learning domain, the use of active learning, the curriculum evaluation practice and the

application of various continuous assessment techniques in classroom teaching were not effective. Many of the school principals' leadership skill to attain the vision of the schools by mobilizing the community, fulfilling resources and in general applying shared leadership were not encouraging.

On the other hand, although the engagement of the community and parents in assisting labor and money for school construction was inspiring, their involvement in enhancing their children's learning outcome was very low. As a result, student dropout and absenteeism were common. Above all, in terms of the school environment, the majority of schools in all *woredas* (mainly Tsagbji, Abergele, Sahela and Zequala) was not conducive for the teaching-learning process and was below the standards. Teacher related, leadership related, community related, environment related and student related factors were major contributors for the low practice of SIP in the administrative zone.

The results of this study implied that there needs to be a strong collaborative work among the Regional Education Bureau, the zone and *woreda* education offices and the nearby teacher education institutions to provide continuous capacity building training for teachers, school principals, and *woreda* and zone experts on SIP planning and execution, on methods of teaching, curriculum revision, continuous assessment, instructional leadership, and community mobilization processes. The other implication is that a rigorous work is needed from REB, the zone and *woredas* on recruiting, appointing as well as retaining qualified and well experienced experts, school principals (principals and supervisors) and teachers at all levels by devising various incentive mechanisms (assigning experts by merit, giving houses, transport allowances and additional stipends for those who work in harsh climate). To make the school environment more favorable (by working jointly with governmental and nongovernmental organizations and volunteer individuals), constructing standard schools, fulfilling school resources such as laboratory equipment, library materials, chairs and tables, electricity and pure water are the timely concerns. Lastly, through the strong collaboration with PTSA, KETB and students' council organization, mobilizing the surrounding community to construct better schools, fulfill school resources and facilities and ultimately to improve their children's learning outcomes is vital. Creating effective checking and controlling mechanisms on the school plans and performance reports is also crucial because schools need to operate under a functional accountability system rather than duplicating other schools' plans.

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