Proceedings of the National Conference on

Quality Education in Ethiopia: The Missing Link between Theory and Practices

Date: 23rd and 24th March 2017; Venue: Nekemte, Ethiopia.

Editors
Dr. Eba Mijena
Dr. Tamiru Olana
Dr. Hirpa Legesse
Dr. Raghavendra HL
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A National Conference on
Quality Education in Ethiopia: The Missing Link between Theory & Practices
Date: 24-25 March 2017

Thematic Areas

THHEME 1: EDUCATIONAL FRAMEWORKS, THEORIES, MODELS & IMPLICATIONS
- Theories, Strategies and Practices for School Improvement
- Theories, Strategies and Practices for School Effectiveness
- Theories, Strategies and Practices for Educational Effectiveness
- Models of Quality Education and Practices
- Interactive Teaching-Learning Processes
- Theory and Practices of Assessment

THHEME 2: TEACHERS AND THE TEACHING STATUS
- Recruitment, Selection and Pre-Service Training
- School Leadership and Teacher’s Satisfaction
- Parents, Students, Teachers and School performance
- Teachers and Continuous Professional Development
- Teachers' Involvement in School Decision-making

THEME 3: TEACHING-LEARNING METHODS AND PRACTICES
- Teaching Methodologies and learning Strategies
- Assessment Vis-à-vis Academic Achievement
- Curriculum Development and Evaluation Practices
- Technology in Quality Education
- Instruction Leadership and Classroom Management
- Graduates Competency and Societal Expectation
- Teaching Practices and Competencies

THEME 4: LANGUAGE, IDENTITY, CULTURE, COMMUNICATION AND SOCIETY
- Stakeholders' Understanding, Perception and practices
- Journalism, Communication and Media Studies
- Language in Education
- Indigenous Knowledge, Folklore and Culture in Education
- Literature in Language Teaching
- Language, Gender and Inclusive education
- Individual differences and Inclusive education
- Psychological factors and their impacts
- Family, School and Society Partnership
- Employment, Entrepreneurship and Quality Education
- Attitude towards Multilingualism

THEME 5: EDUCATIONAL LEADERSHIP AND STUDENTS’ LEARNING
- Educational Supervision and School Improvement
- Parental Involvement and Academic Success
- Leadership Styles and Academic Achievement
- Educational Governance and Students’ Learning
- Resource Allocation, Distribution and Utilization
- Transformational Leadership and Educational Reform
Preface

Welcome to this volume of the proceedings of a National Conference on “Quality Education in Ethiopia: the Missing Link between Theory and Practices”, which was held on 23rd and 24th March 2017 at Wollega University, Nekemte, Ethiopia. In this proceeding, the opening and closing addresses, the keynote addresses and key technical papers presented on the Conference have been compiled. Conferences traditionally take a broad approach to thinking and cognition, in all their various aspects and manifestations, and this is broadly reflected in the content of the various papers submitted for publication in this Proceedings. The papers are from educationalists and researchers working in formal education settings, from Early Childhood settings to Higher Educational institutions. All the papers are compatible with the core thematic areas requested for the conference. The publication of the papers aimed at vividly showing the gap between the theory and practices of quality education in Ethiopia and avail it to the wider audience.

In many countries, both governments and educational institutions have been working actively to provide quality education to their society. To do so, they have theorized many approaches methods and techniques that can take to utmost quality improvement. In Ethiopia also many fold education quality theories and practices have been undertaken. Yet, the issue of providing quality education is still a major agenda at all levels of education across the country and it seems that it will continue to be of key issue of concern for the coming decades.

Globalization in the 21st century presents educational institutions and states with a number of assignments. One of the major assignments is how to assure quality education to bring about global competitiveness through a variety of policies and actions. As a result, quality assurance mechanisms and rankings, which emphasize output monitoring and measurements and systems of accountability and auditing, have become popular worldwide. In developing countries like Ethiopia, where resources are scarce, quality education is a key priority. This must be practiced considering the issues of relevance and international standards.

The Concept of Quality

An educational definition of quality is that of an ongoing process ensuring the delivery of agreed standards. These agreed standards should ensure that every educational institution where quality is assured has the potential to achieve a high quality of content and results. Quality is a multi-dimensional concept, which should embrace all its functions and activities: teaching and academic programmes, research and scholarship, staffing, students, buildings, faculties, equipment, services the community and the academic environment. It should take the form of internal self-
evaluation and external review, conducted openly by independent specialists, if possible with international expertise, which are vital for enhancing quality.

Quality Practices
All nations have some kind of quality practices mechanism in place, although they differ significantly in terms of purpose, focus and organization. It is critical that all educational institutions maintain their own internal, rigorous quality assurance systems. These structures should reach every area and every level of teaching and learning. Students are the ones for which education has been primarily designed. They are the ones dealing with it day by day over several years. Thus, in the practices of quality education, they are considered as real experts on educational quality assurance.

Theory of Quality Education
Any nation or any educational institution has been trying to theorize quality education and to put it into practice. (Korthagan and Kessels, 1999) argue that there appears no shortage of theorists for quality education; however, many ideas are abandoned without practical applications. Indeed, it can take years for theories to materialize into practice, if they materialize at all. By implication, we need to work hard to minimize the missing link between theory of quality and its practice otherwise we stay theorizing it without seeing any quality.

The issue of quality cannot be disassociated from the quest for excellence, while the setting of academic standards and evaluation criteria should take into account the diversity of situations across the region. Each nation and education system should aim to put in place quality assurance systems and procedures that meet the needs and the culture of the local society. Importation of systems from one country to another need to handle with care so that any new set of arrangements and anchored firmly in cultural and social traditions. The developments of Quality Assurance like the process itself are continuous and thus a periodic review of development needs to be carried out by all those involve in the process.

The Conference Purpose, Thematic Areas and Organization
The main aim of the conference was to review the link between theory and practices in Ethiopian Education Systems. Besides, the purpose of this conference was to provide teachers, administrators, school boards, higher education faculty and staff, and other stakeholders’ opportunities to examine continuous improvement principles that have been successfully implemented and sustained at various levels of education. Sharing ideas is for reconciling the gap between the variables with
established systems and generate high-achieving, creative, and collaborative learners.

The main and sub-thematic areas of the conference were well stated in the conference documentation and the thematic areas are as follows,

**THEME 1: EDUCATIONAL FRAMEWORKS, THEORIES, MODELS & IMPLICATIONS**
- Theories, Strategies and Practices for School Improvement
- Theories, Strategies and Practices for School Effectiveness
- Theories, Strategies and Practices for Educational Effectiveness
- Models of Quality Education and Practices
- Interactive Teaching- Learning Processes
- Theory and Practices of Assessment

**THEME 2: TEACHERS AND THE TEACHING STATUS**
- Recruitment, Selection and Pre- Service Training
- School Leadership and Teacher’s Satisfaction
- Parents, Students, Teachers and School performance
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- Teachers’ Involvement in School Decision- making

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- Psychological factors and their impacts
- Family, School and Society Partnership
- Employment, Entrepreneurship and Quality Education
- Attitude towards Multilingualism
THEME 5: EDUCATIONAL LEADERSHIP AND STUDENTS’ LEARNING
Educational Supervision and School Improvement
Parental Involvement and Academic Success
Leadership Styles and Academic Achievement
Educational Governance and Students’ Learning
Resource Allocation, Distribution and Utilization
Transformational Leadership and Educational Reform

Organization of the Proceedings
This publication is arranged into three main sections. The first is made up of the opening addresses given on the formal commencement of the conference. The conference had formal welcome addresses from Dr. Eba Mijena, President of Wollega University, Nekemte, Ethiopia and opening speech from Ato Moges Edae, East Wollega Zone Administrator. The second section contains keynote addresses made by Prof. Abiy Yigzaw, Bahir Dar University, Ethiopia and Dr. Firdisa Jebessa, Institute of Educational Research, Addis Ababa University, Addis Ababa, Ethiopia. Third section comprises those plenary addresses for which presenters made detailed papers available. It is unfortunate not to include all papers presented in the two days conference because of lack of space.

Papers published in here were submitted as formal research papers by authors, and were subject to a peer review and editing process conducted by a panel of academics from Wollega University, Nekemte, Ethiopia. These papers were also proof-read and edited for English style, grammar and syntax. The editors of these papers trust that the editing of certain English expressions, grammar, and so on, have not changed the central meaning and content of the papers, and that these remain true to the authors’ intent. Therefore, the views expressed therein are entirely those of the authors. We would like to thank all those who sent their papers in time.

Editors

Dr. Eba Mijena
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<td>AAU</td>
<td>Addis Ababa University</td>
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<tr>
<td>ANOVA</td>
<td>Analysis of Variance</td>
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<td>ASCA</td>
<td>American School Counselor Association</td>
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<td>BL</td>
<td>Blended Learning</td>
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<td>CLIL</td>
<td>Content and Language Integrated Learning</td>
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<td>EC</td>
<td>Ethiopian Calendar</td>
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<td>EFA</td>
<td>Education for All</td>
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<td>EFL</td>
<td>English as a Foreign Language</td>
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<td>EQUIP</td>
<td>Education Quality Improvement Program</td>
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<td>ESDP</td>
<td>Education Sector Development Program</td>
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<td>GC</td>
<td>Gregorian Calendar</td>
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<td>GEQIP</td>
<td>General Education Quality Improvement Program</td>
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<td>Growth and Transformation Plans</td>
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<td>Higher Education, Relevance and Quality Assurance</td>
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<td>ICT</td>
<td>Information and Communications Technology</td>
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<td>IT</td>
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<td>MoE</td>
<td>Ministry of Education</td>
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<td>NEAEA</td>
<td>National Educational Assessment and Examinations Agency</td>
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<td>PhD</td>
<td>Doctor of Philosophy</td>
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<td>PLSP</td>
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PLSP : Perceptual Learning Style Preferences
PLSPQ : Perceptual Learning Style Preference Questionnaire
PTS : Preferred Teaching Styles
QA : Quality Assurance
SPSS : Statistical Package for Social Sciences
TPCK : Technology, Pedagogy and Content Knowledge
TQM : Total Quality Management
TTC : Teachers Training College
TV : Television
TVET : Technical and Vocational Education and Training
UNESCO : The United Nations Educational, Scientific & Cultural Organization
WU : Wollega University
Welcome Address
By
Dr. Eba Mijena
President, Wollega University, P.O.Box 335, Nekemte, Ethiopia

Your Excellency Mr. Moges Ede’e, East Wollega Zone Administrator, Nekemte,
Your Excellency Prof. Abiy Yigzaw, Professor of English Language, Bahir Dar University, Bahir Dar
Your Excellency Dr. Firdissa Jebessa, Associate Professor at AAU, Addis Ababa and
Distinguished Guests, Ladies and Gentlemen,

Dear Participants,

On behalf of all the Wollega University community and myself, I would like to extend a warm welcome as well as my deep appreciation to the Honorable guest Mr. Moges Ede’e for gracing over this year’s Education Conference. I would like to appreciate the keynote speakers and all participants of this conference for their presence here, in spite of very busy schedule, is a proof to the importance that attaches you to WU, this particular conference and education sector in general. I would also like to take this opportunity to welcome and express our appreciations for the presence of a large number of different officials, paper presenters as well as our friends from different corners of the country.

Dear Participants,

It is clear that there are significant developments in the education sector of the country. The number of schools has shown dramatic changes from time to time; the number of students accordingly. However, the quality of education currently remains to be the hottest issue of national debate and I am glad that the Conference has decided to adopt ‘Quality Education in Ethiopia: The Missing Link between Theory and Practices,’ as the theme for this year’s conference. It’s main purpose is to bring various stakeholders to come together and discuss on issues related to Quality Education in Ethiopia: The Missing Link between Theory and Practices with the major focuses on: educational frameworks; theories, models
and implications, teachers and the teaching status; teaching- learning methods and practices; language, identity, culture, communication and society, and educational leadership and students' learning. It is believed that it gives researchers ample opportunity to exchange views on experiences, opportunities and challenges in the areas of the thematic areas identified and on the possibilities that are offered for using the innovative ideas and experiences which will come out of it to tackle the pertaining quality related challenges in education of the country.

It is very clear and obvious that the future of the country lies in the hands of our children. Our children are most important to us all and they constitute the real wealth of the nation. Therefore, it is imperative that our they receive the best quality education when they are with us in schools, so that they may grow up to be fully educated and productive citizens who would serve themselves, their parents as well as the country as well, towards fulfilling the vision of becoming the middle income country by 2025.

Ladies and Gentlemen,

As indicated earlier in my talk, at present, the country is formulating strategies and action plans aiming at realizing the vision to become a middle income country by 2025 which is founded upon improving equity, access, quality and relevance in education. The country's commitment is to build, develop and promote the “quality of life” of its peoples. In this regard, we highly appreciate the initiative of organizing this conference to exchange views and experiences among researchers on introducing and promoting quality of life of people in the country. I believe that it is very important and timely then to organize forums on such critical and meaningful issues for a better understanding of them and timely actions. Thus, this conference won’t be a mere gathering of scholars but as you are aware is a crucial step towards investigating and looking into the critical issues which in one or another way negatively affect the education quality. It is expected to have a larger impact on the capacity building of our staff and the future intervention policies. We also hope that we would be able to provide for a wider dissemination of the existing knowledge and present experiences in the thematic area indicated.

Excellencies, Ladies and Gentlemen,
During this Conference, you are going to hear a number of presentations, which address issues central to your roles in assuring quality in education. Issues such as the role of assessment as a tool for promoting learning, teacher appraisal and curriculum reform are all topics which are addressed and which you have to grapple with on a day-to-day basis. However, to improve your schools and implement the worthwhile changes that are advocated is greatly dependent on the teachers, curricula, school environment and other related factors which are really in our control. Without a committed and high quality teaching force, much of the advice you will be given today will be of limited value. In this regard, I anticipate an emerging crisis in the country which is going to severely affect our teaching force and eventually the quality of education. So, what is the crisis that we are facing? I refer to the rapidly declining attraction of teaching as a career for our school leavers and graduates.

Different renowned researchers and participants have come from different corners of the country to attend this conference. The 69 Abstracts were submitted based on the call for paper. Out these, only 43 papers were provisionally accepted of which 24 papers have been selected for today’s presentation based on their relevance and quality. More than 250 participants are expected from different universities, institutes, four Wollega Zones and Woredas. Sharing experiences on existing international trends and views becomes paramount important whereby conferences of this kind give opportunity for better understanding of factors which affect quality in education. I believe that lots of valuable initiatives and policy issues will come out of it. Having said all this, finally, I would like to thank you all for your participation and friends and colleagues of Wollega University who have contributed a lot for conducting this conference.

I wish you all a fruitful discussion and I look forward to welcoming you again to the conference and wish you all have the most pleasant time in Nekemte.

*I could say quality is all about what we think, how we do what we think and the result we expect from what we do. It is therefore the issue of working on our thinking!*

Thank you for your attention.
Opening Speech
By
His Excellency Mr. Moges Edae
East Wollega Zone Administrator

Honorable Guests
Dear Presenters and Participants
Ladies and Gentlemen

It gives me great pleasure and I am really honored to attend this national conference focusing on one of the critical aspects of our educational system, quality of education, which has major impact on our development endeavors.

Also this important academic event marks one of the milestones of, ‘young’ Wollega University’s dynamic journey towards being part of our developmental aspirations. In fact, this event is in line with government’s nationwide efforts to ascertain quality education and mainstreaming our educational practices to meet the current developmental needs of the country.

Let me to appreciate the organizers of this national conference for focusing the link between theory and practice as a factor in quality of education in Ethiopia. The thematic areas you have selected for this National Conference, I am sure, will bring together different stakeholders from various fields to discuss and share academic research outputs and knowledge on this important issue of national educational framework.

No doubt, education is the greatest, proven tool for bring socio-economic transformation and improving not only the economic growth but ensuring better standard of living for our community. But today, quality of education is our national priority.

Quality of education is in fact concerned with not only the better infrastructure we have or the best teaching tools we apply or the quality teachers we do have but it is more concerned with to what extent we are able to train our students to practices the academic knowledge they gained in the classroom into real life situations.

Our Higher Education Proclamation aims to ensure that the higher education system directly contributes for economic development and poverty reduction. Today
government recognizes the importance of education for national development. In order to ensure this, our educational content must be harmonized with the country's economic needs. In other words, theory and practice should effectively be linked.

During the last three decades, our government is making tremendous efforts to ensure prosperity for our people. To continue an accelerated economic growth and to achieve the core objectives outlined in our growth and transformation plan, we need a strong pool of skilled manpower. On the other hand, we need to ask ourselves, whether these skilled human resources are in a position to link the theoretical knowledge they gained in the class rooms with the enormous challenges facing the society in a more practical way.

Experiences across the world show that higher educational institutions have the ability to demonstrate better interactions with community in sharing knowledge and applying problem-solving tools. Today, there is an urgent need to devise more effective mechanisms to link theoretical knowledge of our students with a number of challenges facing our community and people.

Indeed, such a kind of academic experiment will not only bring tangible transformation in our society but also equip our student communities to face this, today’s past changing competitive world. Therefore, it is a right time to make consistent efforts to bring theory and practice together.

I am in confident to tell that Wollega University is doing its best to balance the increasing aspirations of people for better quality services and its capacity to deliver it effectively. Truly, in a short span of its existence, Wollega University is making a credible point that it is in the right direction to fulfill the needs of our country, particularly that of the surrounding community.

I am sure the outcome of this national conference will fill the gap between theory and practice.

I congratulate Wollega University.!

and

I wish all the presenters and participants a good time.

With these words, I officially open this National Conference.

Thank you!
Keynote Address

By

Prof. Abiy Yigzaw

Professor of English Language, Bahir Dar University, Bahir Dar, Ethiopia.

His Excellency: Dr. Eba Mijena, President of Wollega University
His Excellency: Mr. Moges Ede’e, Administrator of East Wollega Zone
His Excellency: Mr. Abebe Kebede, Administrator of Horo Guduru Zone

Dear Respected guests and Conference participants

Ladies and Gentlemen,
First of all, I would like to extend my sincere gratitude to the Wollega University and to the Organizing Committee of the Conference for giving me this opportunity.

I feel very much honored and am exceedingly exhilarated to speak out my mind in this respected conference on the crucial issue of quality education, focusing on the missing link between theory and practice. To narrow the scope of my speech, I have limited the content to commonplace issues related to:

1) brief introduction
2) the concept of quality education
3) general quality problems in Ethiopian education
4) the professional capital approach
5) qualifications framework and level descriptors
6) CLIL as a center of attention
7) intellectual leadership
8) final remarks

Introduction
Cognizant of the multifarious problems that entangled the quality of education in Ethiopia, the government has endeavored to reform the educational system in the country. In the reform movement, the government had striven to disentangle education from the complex problems of relevance, quality, accessibility and equity. Because of the effort exerted, in the education sector, Ethiopia has registered
tremendous advances; and this has been a reality to all levels—from primary to tertiary levels. The advances incorporate paving the avenue towards access and equity to education.

First of all, we have to be sure about our standards of quality; and a number of questions come to our minds when we think of them. For instance, questions like qualifications framework and level descriptors. Do our students have the capacity of reasoning out, critical thinking, academic writing skills, life skills, as well as communication and arithmetic skills and to what level? These are real concerns. Although all of us have the knowledge and understanding of all these phenomena in education, I feel that they are forgotten practices in our education system for our emphasis is content area teaching and learning. I feel that we are in deep crisis in this regard. We have to see deep into ourselves where we are concerning enabling our students to perform in their schooling as well as in workplaces after graduation.

The objectives of education do not take cognizance of the society’s needs and do not adequately indicate future direction. The absence of interrelated contents and mode of presentation that can develop students’ knowledge, cognitive abilities and behavioral change by level, to adequately enrich problem-solving ability and attitude, are some of the major problems of our education system (Federal Democratic Republic Government of Ethiopia, 1994: 2).

After this brief general introduction of some of the areas I will talk about, please allow me to address selected quality issues from the multitude I presumed are good to mention in this Conference. Let me start with the different perspectives scholars and institutions possess about what quality education is.

The Concept of Quality Education
There is no consensus among scholars regarding the concept of quality education; it is an elusive and enigmatic concept. The concept and definition of quality education varied at different times, and seemed developmental. For instance, Beeby (1966), focusing on the quality of education in developing countries, introduced us with three levels of quality categorized as classroom quality, (which is concerned with the acquisition of knowledge, learning skills and attitudes); provision of quality service to community (relevance); and quality as judged by social criteria (external quality).
The other definition is Hawes' and Stephens' (1990) definition which restricts itself to primary education. These authors interpret quality in three strands: efficiency in meeting set goals, relevance to environmental needs and conditions, and relevance to human betterment. They suggest about arriving at different improved standards with regard to knowledge and learning skills, creativity, critical thinking and behavior. The definition also adds the concept of relevance, which is relevance to context, to the present and the future needs of learners and to human development.

Sayed's (1997) quality concept relates with efficiency, value for money and meeting the demands of educational consumers. Delors et al's concept of quality education, on the other hand, consists of UNESCO's view of quality and focuses on learning to know (mastery of the content knowledge), learning to do (collaborative learning), learning to live together (living in a social context), and learning to be (building of whole person). This concept of quality education has influenced the inclusion of life skills in quality education.

The fifth definition of quality education by Lockheed, Verspoor and Associates (1991) relates with World Bank's and the Economist's tradition and sees effective school as orderly school environment, high standard education, qualitative school leadership, adequate acquisition of materials as inputs. The World Bank Sector Strategy (1999) is concerned more on learners' cognitive achievement. The Dakar Framework for Action focuses on 'access and equity, quality and relevance, capacity building and partnerships' (Barrett et al, 2006:9). There are also other views, such as the views forwarded by Education for All (EFA) about quality education which seem to be a sheer amalgamation of the conceptions of the aforementioned scholars and institutions hold.

In Ethiopia, as indicated by Higher Education, Relevance and Quality Assurance (HERQA), quality is defined as 'Fitting for Purpose'. Although this view seems to be limited in scope, the practical definition as used in the Ethiopian Education System is all-embracing: it embraces all the conceptions which I endeavored to review very briefly above. If we look at the Ethiopian National Policy of Education (1994), it states the complex problems (such as relevance, accessibility, equity and quality) that had entangled the quality of education. It also indicates that needs-based education, higher order cognitive processing, and students' problem-solving ability enhancement was not emphasized in the past education system(s). So, as a corrective measure, the education policy avers that the aim of education in Ethiopia
is to enable students to become problem-solvers, innovators, reflective and creative.

**General Quality Problems in Ethiopian Education**

Have our curricula and classroom instruction brought these expected qualities? Students’ learning capacity and performance reveal that the education quality is declining from time to time. I think this reality calls for revisiting and vivifying of our instructional strategies. Allow me to mention an example discipline in which quality deterioration vividly and lucidly observed.

The importance of the English language to Ethiopia is palpable. The language serves many educated people and students in getting knowledge of philosophy, science and technology and in every other spheres of life, because a lot of sundry books are written in English. It also serves in communication and is used as an official language in very limited offices. Above all, it is used as a medium of instruction in secondary and tertiary level education in the country. So, the role of the English language in securing quality education is palpable. There is a high bond between students’ English language competence and their success in their learning; in other words, one’s poor competence in English language can be equated to his/her failure in education. Despite its relevance and decisive role it plays in the Ethiopian education, the use of the language is rapidly declining. This has been evidenced by many researchers; Berhanu and Shiferaw (2009), Stoddart (1986), Tekeste (2003) and Wudu (2009) are few out of the numerous researches. I have quoted Stoddart concerning his finding about Ethiopian students’ competence of the English language.

Students do not possess sufficient English even to understand what they hear from their teachers or read in their textbooks, let alone to participate actively through their own speaking and writing. … as a result of the inability of students to function through English, the quality of teaching and learning in schools has been very adversely affected. At best, it means that mere rote learning often prevails, with no critical and creative participation of students, and little enough of even simple comprehension by them of what they are being told. And at worst it means that some – possibly many – students whose English is not sufficient even for rote-learning spend most of their class hours copying down notes that the teacher has written on the blackboard, and transforming them in the process into complete
nonsense. In such a situation it is no longer appropriate to call English a medium of instruction; rather it has become a medium of obstruction (Stoddart, 1986: 6-7).

Worst of all is studies indicate that even English language teachers have deficiencies in using the English language. What is the cause? Is it a problem associated with our teacher education programme, trainees’ negligence and lack of responsibility, their disinterest in English language, deficient background or our teaching methodology? Each of these factors and others might have their roles, but the burden of the yoke is more upon us teachers, who are supposed to mediate students’ learning and bring changes. We are talking amongst us that the quality of education and the English language proficiency of those who learnt English in the so-called traditional methods are exceedingly better than our students who are being taught in the modern methods. What is the mystery behind? Are the methods we use really culture-orientated? If so, why don’t we search for other alternatives? We have tested methods of language teaching in our traditional school, the kes and the medrasa, that enable learners count alphabets within days and even qualify them in high order thinking and creativity such as Qine composition. I strongly argue that Qine is extraordinarily high level creativity in education, and it is unique to Ethiopia. Why don’t we try out these and also search for other alternative ways of teaching learning?

As a solution to our problems, in addition to endeavoring for search of alternatives, we should work hard and become committed in research for the identification of real causes for our failure and cooperatively exert endeavors for the English language quality regain and rejuvenation. If we once succeed for our efforts and commitment, I have the trust that success begets success and it soars up.

Let's see also the problems in cultural studies. Our cultural heritages are our identities, and yet there are cultures we should retain and some others we should disown. Luckily, we Ethiopians are rich in cultures; we are the home of diverse cultures. I feel very much offended, however, why we long for the alien, particularly when it harms our integrity and culture. As we are living together with the other world sharing the same earth, we can imitate the culture of science and technology, education in general, and share best experiences. My worry is that cultural loss leads to identity loss. So, we have to ask ourselves how much we help our students understand their cultures. Have we really known our cultures? Quality begins from respecting the self; and the self is an amalgam of the culture. This is a missing
element in our education. Lots of research is awaiting us for identifying the best we should learn from others, and knowing and understanding our cultures. We can also see diverse problems in the various fields we are training our students.

**The Professional Capital Approach**

I would like to raise the concept of capital to show the importance of human capital as a necessary constituent and contributory to quality education. The concept ‘capital’, which is value-laden, has originally emerged from the economic sector. This concept has been adapted in the teaching field revealing itself in two opposing faces: business capital approach and professional capital approach. The drive of the business capital approach is highly associated with societal demand of earning short-term profit from investment; education is a tool; a tool for marketing. In this approach, teaching is not rigorous; it relieves teachers from hard work and students from extensive practices. Is this the approach we should practice or we are practicing in training engineers, doctors, teachers and professionals in different spheres of life? Of course not, but there were ostensibly some reflections of this nature in our training of teachers. Some example is given below in part 6 below.

The opposite stance towards education is the professional capital approach. Unlike the business capital approach, teaching is hard and technically difficult. It attempts to respond to differentiated needs and the skills for solving problems in different situations, and is supported by technology. However, technology is not by any means assumed a substitute to teachers. Within the professional capital approach are the human capital (which is about the talent of individuals); the social capital (which is about the collaborative power of teachers); and the decisional capital (which is the decision making power of teachers related to teaching and learning).

I don’t want to go deep into the literature, but I want to emphasize on our practices and an example missing element. Although the professional capital approach is largely being used in our system, there are some mal-uses of technology; plasma teaching is an example to mention. The plasma should have been used as a support technology of classroom instruction; however, the practice is entirely different—the plasma instruction dominates the classroom instruction; in other words, the plasma and the teacher have exchanged their roles in the instructional system in the Ethiopian high schools.
I believe interaction plays a vital role in enhancing student learning. In this world of education in which social constructivism for knowledge development is recommended and utilized, abandoning the role of the teacher in the classroom instruction harms the quality of education. The solution to this problem is reversing the current roles of the two agents in instruction and returning to their past roles, the roles they deserve as a main actor and a support.

To swerve the direction towards what it should be is not an easy task for various reasons. So, as scholars, we need to show lucidly the advantages and disadvantages of such kinds of classroom instruction and provide alternatives, for the sake of quality education.

**Qualifications Framework and Level Descriptors**

Internationalization has influenced many universities in Europe, America, Asia and Africa to move towards competency-based education. So, they are now trying to make educational competence and contextually applicable level descriptors (South African Level descriptors Authority [SAQA], 2012). Level descriptors constitute students’ generic and discipline-specific skills and capability, such as critical thinking and reasoning, life skills, subject matter competence, academic writing, deep reading and presentation skills, interpersonal and communication skill, etc.

Our curriculum, with the emphasis of competency-based education, seems to have been designed based on the Germans’ experience. The Qualification’s Framework seems more or less developed; however, the level descriptors are not yet worked out. Luckily, the level descriptors for primary and secondary Amharic and English courses are already in use. But, we haven’t yet done for tertiary level except for TVET.

This is a missing element; and if it is included, it might add value and give direction towards the quality education we presume to be. It can also be a guide for our materials development. So, let’s take time working out the descriptors; at least let’s initiate the idea if at all we think it should be worked out at a national level. Listing learning objectives is not enough. Besides, I suggest we should think beyond offering content knowledge to our students; we should endeavor to create a whole person who is fit to this time of globalization, sophistication and competition.
Quality education and curriculum are inalienable concepts; they are highly enmeshed and interwoven. The broad learning domains such as content knowledge, skills or procedural skills and values that refers to dispositional knowledge, such as attitudes, motivation and others; and their integration are the basics for curriculum development, development of students’ competencies or capabilities in critical and creative thinking, problem-solving, innovation and reflection. Curriculum developers should take time to think to answer fundamental questions like:

1. Which knowledge, skills and values should we include in our curriculum?
2. Would the acquisition and development of such knowledge, skills and values, and of the associated capabilities and competencies, enable our young people to lead meaningful and productive lives?
3. Is our current paradigm of a set of ‘subjects’ in the curriculum adequate?
4. How can we make learning relevant and interesting to students? [We can extend this view to the later in professions] (Stabback, 2016).

Scholars tell us that curriculum development should pass through processes such as analyzing the situation in which the academic knowledge and skills can be used, and then applying the Delphi method, which involves subject experts, senior teachers and decision makers to decide on the needs and curriculum content. Other components in the curriculum development process include critical incident analysis, policy decisions, goal information, trial and development; then implementation and evaluation. The final stages are following up and continuous monitoring and evaluation.

Stabback (2016) tells us that we can judge the quality of the curriculum on the basis of its development (how it was developed), the curriculum itself (its contents and relevance), its implementation (how it serves to achieve the intended goal) and evaluation.

All these require time to think, study needs and situations. However, my experience tells me that the curricula, except the final so-called Harmonized Curriculum, we developed were done in a haste. Particularly, the so-called teaching materials called the Modules were prepared within a month or so; and surely, this will affect
and has affected the quality of education. Were our curricula needs based? Did we make any consultation with stakeholders to design courses in the curricula and evaluate them? Did we develop the teaching materials targeting the students’ competency development? I feel that these are the missing elements we should have considered when we developed curricula and teaching materials.

As a solution, as far as we aspire quality education, we have to meticulously go into the curricular contents and instructional delivery, research to see how much we have enabled our students at different levels to achieve the expected competencies and revisit what we have done. Another missing element is a tracer study, which is very crucial to see whether or not our graduates are effective and efficient in different work places.

Another point I would like to raise concerning curriculum is the instructional emphasis we have given to our curriculum. If I retrospectively think about what happened in the 70s and about mid 90s, there was a balance of skills and methodology courses with reasonable frequency of teaching practice. This was changed since the mid-90s in which we had English contents pertinent to what the would-be teachers teach in their future career and more teaching practice. Now, as it is also mentioned below, methodology and practicum courses are left aside; and now content-based and support knowledge are given exclusively. Another related missing element which has affected our quality of education is the quality of the modules. I suggest you, my colleagues; let’s evaluate the contents and the tasks in the modules. If we properly design tasks in modules, they can make our students busy solving problems, work ardently, ad knowledge, and enhance their critical thinking capacity. However, as far as my evaluation is concerned, many of the tasks in the modules are not up to the standard and they don’t make students work harder; rather they have urged them to become surface learners.

I think this hodgepodge and focus on surface teaching have resulted from ambition and haste. The missing element in here is loose consideration of the procedures in curricular development and material writing. I suggest we take time and revisit all the materials we are making use of for better quality material, that focus on deep learning.
CLIL as a Center of Attention

In Ethiopia today, the application of content and language Integrated Learning (CLIL) is introduced in TVET, with inadequate or no teacher preparation to do the job. CLIL is a completely different learning experience, because content and language are taught together. A language teacher has the challenge to learn more about subject content and subject teachers need to learn about the language needed for their subjects. The practice in our country is that the content area subject teachers are also engaged in teaching the English language; and we do not have English language teachers in TVETs. In my view, in our context, in which the English language capability of teachers and students is very frustrating, such method of teaching can impact on the quality of education, particularly it affects the English language competence of learners, which is already at the brink of death. The worst of all is content area teachers, besides their low competence in their language competence, they have a negative attitude towards teaching the language and practically they pass the language element included in teaching manuals by merely listing the so-called language elements. Few researches conducted in Ethiopia (Wubalem, 2017 and Yohannis, 2017) indicated this fact. This leads us to hastily conclude that we have wallowed in taking serious measures before we have seen the cons and pros of sensitive actions like this.

My argument is: a) adequate training on English language pedagogical content knowledge should be provided to content area teachers as far as the content and language integrated teaching is assumed mandatory to apply. Thus, teacher preparation should include content area and language proficiency; otherwise, I presume the challenge may not be only on the learners’ English language competence but also on the content area subjects; b) CLIL teachers should be immensely involved in personal teacher development schemes by making use of every available resource; and c) what if we continue with our traditional way of teaching as far as it is the less evil than the new introduction; that is CLIL, to apply. If my suggestions get heed, I know it may not be easy to change policies; it is time-taking to convince policy-makers. So, I argue, as a provision, language teachers and educators have roles to play. 1) We can make researches in these problem areas so that our findings beget a child of change, a better alternative; b) we should endeavor to find out better methods of teaching within the CLIL to support content area teachers and students; and c) we should collaboratively work with TVET institutions to bring quality education.
Intellectual Leadership

Quality in education can be arrived at if instructors could play their intellectual leadership role; that is, in sharing of our knowledge and experience to young learners. Teachers’ invaluable role in impacting on the youth can be realized only when we update ourselves with our disciplinary field and knowledge of the world which reveals itself through classroom instruction and supervision. Instructors play the responsibility and national obligation to enable young learners so that they can become hope of the land, soothing the country in strife. The burden of the yoke and the positive strides in all lanes of development of the nation rests on us.

Although we possess these responsibilities, we have travelled in the road not to be taken the avenue that leads to the pitfalls of disaster, national demise and unfruitfulness; relinquishing our traditional route of intellectual leadership. Please allow me to respectfully mention Prof. Macfarlane (2012) who earnestly advised us in his book called *Intellectual Leadership in Higher education: Renewing the Role of the University Professor* to get out of the jeopardy we have engaged ourselves in, knowingly or unknowingly.

Macfarlane truly, and of course, vehemently elucidated his reaction against the currently exercised leadership which has skidded out of track of intellectual values, leadership, and the shape and direction a university should have followed. Macfarlane views that the modern universities are adrift and the core values of academic freedom and duty are being jeopardized because senior instructors are relinquishing their traditional roles of academic leadership to a hard management style more concerned with measurable data than original thinking. Academics have drifted down more to administrative duties rather than their roles as professors.

Dear participants! Subject area, content pedagogy, mastery alone is not a guarantee to good teaching and quality education; one should experience these in his professional life. If we go astray from these values and engage more in corporate leadership, no doubt, “an unbalanced emphasis on research with corporate sponsorship stifles original academic thought and creativity.”

So, let’s recuperate our intellectual leadership; let’s get empowered and exercise real intellectual leadership to bring quality education. When I suggest this, I am not unaware of the powerful external hindrance and our own capacity limitations. a) I think discussions with university leaders may, at least through time, convince them
so that they can be cooperative and facilitators of our empowerment; b) we have to put our policy of internationalization into practice. By exercising the latter, we can also solve the problems of supervision at our postgraduate levels we have usually encountered; and above all, we get invaluable experiences that can and even will bring dramatic quality education.

Another cause that has a diminishing effect on the proper, traditional intellectual leadership is over business meant to satisfy our diverse needs. There should be high level negotiation with government bodies and university officials so that teachers could make their living on their intellectual leadership: teaching, supervision, research and consultation.

In short, to bring quality in our education, we should stand and think and start trekking on our traditional pathway to find our lost child; that is quality in education. However, I believe that we should exert a joint effort, since isolated, individual endeavors may contribute only little to reap quality education products from the field of education. It is only when we recourse back to travel on the pavement we used to walk on in our traditional professional duties that we can contribute to quality education; otherwise, total devastation is near; a devastation very difficult to get out of Dear Participants! A stitch saves nine.

Other missing elements to our stride towards quality education;

a) Medium of instruction (Let’s use Ethiopian languages),
b) Learning at least one language other than our native language (as per the policy direction),
c) Proper implementation of continuous assessment and collaborative learning,
d) Development of reading habit, and
e) Using local knowledge, materials and teaching methodology.

Final Remarks
I believe that I have mentioned few of the many challenges associated with quality education in Ethiopia. It is a glaring fact that we are uncertain of the future of education in Ethiopia as far as it continues the way it has been. But, if we collaboratively exert our energy, and use our capacity with commitment, we can swerve the direction of education towards betterment; and I hope the government will support us to pace ahead. Finally, I call upon you, my colleagues:
1. to engage in team researches as we used to, but the researches we conduct should go further to solve societal problems. Academic researches are for academic enrichment, argument, professional and cognitive development. Grand problem-solving researches, on the other hand, are directly applicable where they deserve to be applied; so, let’s contribute to our community.

2. to conduct interdisciplinary researches; in all our research endeavors, our students should be best actors.

3. to establish partnerships with scholars in Ethiopia and abroad so that we can share experiences. The partnership can be to supervise students in team, in joint research, in team teaching, student-student exchange and in examinations (in Viva Voce). This is crucial because we have launched postgraduate programmes including PhD; and no doubt, we need scholarly support. I believe such partnership will fill in the quality gap we have experienced.

Once again, I would like to thank Wollega University and respected guests.

I am finished.

Thank you!
Keynote Address

By

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His Excellency Dr. Eba Mijena, President of Wollega University
His Excellency Obbo Moges Ede’e, Administrator of East Wollega Zone
His Excellency Obbo Abebe Kebede, Administrator of Horo Guduru Zone
Dear Wollega University Top, Middle Leaders and the Community
Dear Participants, Speakers and Presenters,

Ladies and Gentlemen!
Allow me to sincerely make a keynote address on the title: A Quest for Quality in Ethiopian Universities: Matchless Upheaval. It is my belief that the issue is relevant to the grand theme: Quality Education in Ethiopia: the Missing Link between Theory and Practices that Wollega University organized, a National Conference held on March 17 and 18, 2017 at Nekemte.

Inasmuch as universities are ideal places for harvesting the required quantity and quality workforces, research outputs and relevant services; they are expected to be frontiers of quality assurance. Quality assurance is a deliberate, systematic, unending and incessant process and action of guaranteeing the system to provide adequate confidence about the inputs, processes and outputs of the dimensions of the university functions. Above all, quality assurance within the university culture is doing the right things right. In the current day knowledge based economy and technological landscape; quality assurance has become a survival strategy for universities. Universities all over the world are pressured to guarantee their quality. For Sallis (2002), quality is about always trying to do things right first time and every time, rather than occasionally checking if they have gone wrong.

By implication quality demands quality, and can be written as: \( QO = Q(I_1, I_2, I_3, ..., I_n) + Q(P) \), where \( QO \) is the quality of the outputs of the university functions, \( Q(I_{\ldots n}) \) refers to the quality of inputs, and \( Q(P) \) stands for the quality of the processes by the university in the effort to achieve their respective vision, mission, and goals.
University quality is inherent at all levels of inputs, processes, outputs and impact with people at the center (Figure 1).

**Figure 1:** People-Centered Input-Process-Output-Impact Quality Framework in a Context.

Above all, quality people are at the center of quality assurance: empowered, committed, motivated, and trustworthy staff and leaders. Cognizant of the role of universities for harvesting the required quantity and quality workforce for the emerging economy, Ethiopia has: 1) legislated quality issues; 2) put in place considerable publicity; and 3) formulated Growth and Transformation Plans (GTP I and currently II). Equally, we are living in a dynamic and competitive world characterized by: 1) interconnectedness, 2) technology-dependent, and 3) decentralization with shared common sense of purpose. The local, national, and global aspirations and contexts demand universities to produce people who are: life-long learners, critical and creative thinkers, analyzers and solvers of problems, well informed, empowered, committed, and deeply motivated, knowledgeable, skillful, enlightened, inspired and innovative citizens, possibly with quality and by quality.

Practically, however, quality at our universities remains *searching a black gold in a dark room!* We occasionally witness quality failures resulting from systemic and/or unit level causes. In the first place, our universalities are in a state of “hopeless pride” due to status quo, quantitative targets/gains, instability/busy, (in) visible hands, ad hoc decisions, and institutional fatigues. Whereas the quality intents and efforts at institutional and at national levels are appreciated, they are more of
Descriptive, not strategic, they barely show how to design quality management systems. As a result, plea, applaud, emphasis and resources are geared towards quantitative gains-resulting in vain satisfactions (Firdissa, 2012). One may ask: Is the case Reversible? The answer is, definitely, yes, but it calls for doing the right things right!

![Figure 2: Reversibility of Quality Failures (Firdissa, 2015).](image)

Other than the aforementioned causes for quality failures, there are deficiencies on how to set up quality assurance procedures. Many of the efforts hardly demarcate decisions whether 1) outcome-orientated or process-orientated; 2) internal or external; 3) qualitative or quantitative? 4) evaluated against self-defined criteria or against a model set by a regulatory agency; and 5) decision on the level of utilization of information collected in the effort to assure quality.

Leadership commitment to quality initiatives is also questionable in many of our universities. Studies show that 80% of quality initiatives fail in the first two years, mainly because of lack of senior management backing and commitment. Such management environment also fails to measure and rectify costs of failure, which results in loss of opportunities. This is mainly because; managers in non-Total Quality Management (TQM) organizations spend 30% of their time in dealing with systems failure, complaints- Fire-fighting (Sallis, 2002). In addition to low leadership commitment, deficiencies in policies, systems failure, inability to delegate, appointment of staff who do not share the ethos; wrong people at the wrong level/place; inappropriate actions to correct faults; and blame games are some of the reasons for early quality failures (Sallis, 2002). The same source
further indicates that; it is “teachers who are seen as the scapegoats for failures in the education system” (p.39). Moreover, fearful organizational culture causes quality failure resulting in low/no shared values, lack of constancy of purpose, short-term thinking, job-hopping, visible/invisible figures, hopeless satisfaction, & mistrust.

The causes can be either common that can only be solved by making changes to the institution’s policies, systems, processes, procedures, or special or assignable causes that can be put right without the upheaval of a new policy or redesigning/altering the system, but by the management (with the staff). Other than these, fragility of quality improvement process due to the fluid, illusive, complex, and slippery nature of quality in HE resulting from priority differences, perceptual shift, changes overtime, and antecedents on quality origin (Firdissa, 2013 b).

Exacerbating the effects of the causes for quality failures are HEIs’ low or no readiness for pressures such as: accelerated changes in business environment, increased competition, universality of business, technological changes, scarcity of resources, shift from industrialized to knowledge–based societies, instability in the markets, and visible/invisible hands.

**Preventing the Quality Failures/ Faults**

Preventing the quality failures/ faults call for: 1) designing a quality system linked to the needs and expectations of faculty, students and stakeholders; 2) defining processes and responsibilities needed to attain quality assurance systematic installation; and 3) making quality assurance activities part of the budget. Basically, putting the systems right often means putting the quality right (Sallis, 2002).

As HEIs exist to serve customers, their all parts and systems must dovetail, addressing critical success factors, and considering necessary and sufficient conditions for designing effective quality system. In systemic sense, an organization has to be treated in a holistic manner and consideration has to be given to the effect of changes on all the other parts. It also requires considering national bylaws, directives; institutional mandates and functions. Ultimately, all gain if the system is managed for the benefit of all. Specifically, addressing requirements and needs to the level of satisfaction can be seen in terms of the interests of governments, the key players; citizens who pay taxes; future employers of graduates; students and their parents; teachers, professionals, leaders, who have to play multiple roles in assuring continuous improvement, in fulfilling accountability and compliance; and
other educational establishments or organizations. The case also calls for defining why the institution exists (mission); demarcating what it can do to achieve its long term view (vision); fine-tuning institutional culture and core priorities and beliefs that are shared among its stakeholders (values), and looking the future in a systematic manner (strategic planning)—or orchestrated by leaders.

This is because; leaders are ideal figures for quality assurance. They should feel that quality improvement is too important to leave to others, beyond their ownership. They should feel that unless they do the right things right, there is little that anyone else can do and drive quality. It is when leaders take ownership of quality with integrity and honesty that trust can be built and ownership, vision and mission are shared among the university community.

Leaders are also catalysts to put in place and make functional continuous monitoring, support, evaluation, follow up and action as part of the processes of quality assurance (internally and externally). This is to see how the institution is meeting requirements of its customers, and is achieving its strategic mission and goals. Continuous monitoring, support, evaluation, and follow up take place at three levels: 1) immediate: daily checking, 2) short-term: structured and specific to ensure that things that need to be put right are corrected, and 3) long-term: achieving strategic goals, mainly institution-led evaluation, large- scale and resulting in cyclical steps and processes (see Figure 3, below).

Figure 3: Cyclical steps in quality improvement program
These cyclical steps imply defining processes and responsibilities to attain sustainable quality assurance systematic installation augmented by institutional change of culture and structural alignment delineating responsibilities. The structure should be flat, showing: clear roles, unit optimization, vertical and horizontal alignments, pragmatic command for each process, and line of accountability.

![Figure 4: Structural alignment of Quality Assurance Responsibilities](image)

Equally, making quality assurance activities part of the budget serves both as preventive and remedy from failures. Though student centeredness is the slogan of the day, it is also true that educational success is very often resource driven (Sallis, 2002). It is, therefore, essential to 1) prioritize quality over quantity, 2) empower quality team and staff with resources, 3) make quality issues part of strategic role, 4) link budgeting with the effectiveness and efficiency, and 5) link budgets to case-loading giving the teaching/academic units a leeway to decide. In conclusion, success in quality assurance depends on:

1. authentic and effective systems, procedures, commitments, trustworthy and empowering environment;
2. emphasizing critical success factors;
3. putting up with honest mistakes;
4. properly handling complaints: seeing, rectifying, creating feedback loop.
5. aligning quality system to mission, vision, values and goals;
6. focusing on learning and quality prevention, not cure; and

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7. going beyond the comfort zones of quantitative reporting—all of which are owned through and by leadership!

A Quest for Quality, therefore, Demands Quality!

References


The Status of Quality Education in College of Teachers Education in West Oromia Regional State

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Abstract
This study investigated the status of quality education in teachers training college (TTC) of western Oromia regional state. It focused on Jimma, Metu, Nekemte and Shambu Teachers’ Training Colleges. For this study, we employed a mixed approach (quantitative as a main and qualitative as a subsidiary approach), combining a comparative case study and a survey to investigate the status of quality education in teachers’ training colleges. Data were gathered from Oromia Education Bureau curriculum experts, college deans, college instructors, laboratory technicians’ ICT and library heads. Semi-structured interview was conducted with key informants, observation, and a survey questionnaire as main evidence base. Summary of interview, descriptive and inferential statistics were used to analyze the qualitative and quantitative data respectively. To maintain the quality of education in an institution having a robust internal quality assurance system, qualified academic and administrative staff, an excellent teaching-learning process, commitment of all staffs, material and financial resources and interest, background and commitment of learners are indispensable. The research findings of the study indicate that there was no internal quality assurance mechanism in the institutions. Although more than 60 % of graduates pass the theoretical aspect of the center of competence assessment each year, those who passed and failed the center of competence assessment joined the teaching profession. The Ministry of Education (MOE) was the only responsible body to initiate the development of new curriculum and to revise the existing curriculum. The mandate of the TTC has been participating on curriculum development and revision conference when they are invited by MOE and prepare the module based on the curriculum framework set by MOE. The most common approaches employed in quality assuring teaching and learning in the case study institutions entail monitoring and assessment of staff by department as well as student evaluation, implementing active learning teaching approaches, 1-5 team-based learning, student advice and providing tutorial classes. The research conducted and published by academic staff in all teachers’ training college was not adequate throughout the last three years. The established laboratories were not working effectively. The four most influential factors affecting the quality of education in four case study institutions were Poor Facilities and Equipment, quality of students, low payment for academic staff for the extra-teaching load and commitment and support of academic community for quality.

Keywords: Quality education, quality assurance, and quality review and Pre-service teacher education
Introduction

Many authors indicate that quality in higher education should be viewed as a multi-dimensional concept, embracing all of its functions and activities, teaching and academic programs, equipment, services to the community and academic environment. Internal evaluation and external review conducted openly by independent specialists, if possible with international experts, are vital for enhancing quality (UNESCO, 2006; Lemaitre, 2009).

In 21st century, quality is an important issue in institutions of higher education all over the world. It gains importance because of the fact that key role of human resources have been increasing very rapidly in the present competitive world. Frazer (1994) discussed that “quality in higher education is important because universities must be accountable to society, to employers, to students, and to each other”. Mok (2007) by referring different research literature has the opinion that quality in education is multifaceted, multidimensional, complex, and a dynamic positive concept.

The main issues in the quality debate about higher education in many countries are the maintenance and improvement of levels of teaching, learning, research and scholarship; improvements in the quality and adaptability of graduates; how to define and measure quality; management approaches likely to improve outcomes from universities and colleges; the use of benchmarking and performance indicators; and how to convince stakeholders that institutions and systems are doing a competent job in ensuring quality outputs.

In one sense, the quality debate in higher education is not new, although in the past universities and government agencies used different terms such as academic standards, standards of degrees and diplomas, student assessment, and accountability (Harman 1994). In the past too, the main issues in the quality debate were largely about maintaining academic standards according to some national or international norm, the maintenance and improvement of levels of teaching and learning, and how to provide sufficient financial and other resources to achieve quality higher education. Many of these issues are still important today, but the new quality debate is largely about the achievement of quality outcomes; the establishment of appropriate management processes to monitor achievement and the extent to which specified goals and objectives are being met; assessing the suitability of graduates for the workforce and professions; and providing information
to stakeholders in order to assure them of the quality and credibility of outputs. One of the big differences between the old quality debate and the new quality debate is that, while the old was concerned largely about inputs and national and international academic standards, the new is much more concerned about management processes and their effectiveness, the assessment of outputs and monitoring performance, and how well outputs meet employer and other needs. But quality is also becoming a major issue in the higher education systems of Asia and the Pacific, although within the region there are very considerable variations about how quality issues are perceived and in the priorities that different governments and higher education systems are giving to tackling quality problems.

For some time now, higher education institutions in developed countries have had quality assurance systems and arrangements to improve the quality of their teaching, research and direct community service activities. In recent years, quality assurance has also gained favor in universities/colleges in developing countries. Such developments have been motivated by the challenges developing universities face, many of which relate to changes that are taking place on the higher education market the world over, and to which these institutions have to adjust. Higher education in most developing countries today is characterized by expansion, resource scarcity, increased competition, accountability to more stakeholders and the growing complexity of knowledge. At the same time, most developing countries have adopted policies that are in favor of mass higher education as a means of redressing past imbalances and providing national economies with the high-level skilled manpower required to enhance economic development.

Ethiopia has placed education at the center of its strategies for development and democratization, with strong policies promoting equity and quality of educational provision and rapid expansion of educational opportunity to previously underserved populations (African Union Commission 2005; Transitional Government of Ethiopia 1994). Today teacher training colleges in Ethiopia are under the category of higher education institutions. However, teacher training colleges are accountable to regional Education Bureaus, regional Education Bureaus have the mandate to allocate resources, assign teachers and assure the quality of education. As instructors, college deans, heads of departments and policy makers in education, you may perhaps have this question in their mind — why worry about quality? It is not just because of the college directive that you should think of quality; rather,
quality should be a bottom-up approach and everyone should be conscious of why we should worry about the quality of teaching, programs and institutions.

**Statements of the Problem**

Fargusan, as cited in Paliakoff and Schwartzbeck (2001), observes that quality of teachers is the most critical aspect of schooling and that it has a direct impact on student learning. Literature suggests that quality of teachers depends on educational qualifications of teachers and quality of pre-service and in-service teacher education (Sharma, 1993). Teacher education therefore assumes great importance in achieving the goal of quality education. In order to meet the growing demands of teachers at various levels, the teacher education system has gone through significant quantitative expansion, yet the quality of teachers’ preparation has been overlooked and compromised. Quality is one of the major themes in the past and continues to be the centre in the future in all affairs of teacher training institution.

The ‘quality’ of teachers and teacher training program has been a concern for all policy makers. Research evidences show that teachers are important factors for quality education. Similar studies in Ethiopia show that the impacts of teacher variables are apparent. According to MoE (2002a), quality education presuppose minimum criteria and requirements of the existence of professionally competent and ethically minded teachers in the system, the existence of an efficient management of education, and the supply of necessary educational materials and equipment. In this context, educational input, process, and output come into play in determining quality. The Education and Training Policy of Ethiopia (MOE, 1994) underpin the role of quality education in the development efforts of the nation. Quality education issues have been priority areas in both ESDP III and ESDP IV, and overall development strategy of the country. Therefore, cognizant of the unprecedented roles quality education play in the overall economic development of the country, investment in teacher development programs is very crucial.

In 2010, the Government also launched the General Education Quality Improvement Program (GEQIP) with the objective of improving the delivery of quality education in five key areas (World Bank 2006): (1) curriculum, textbooks and assessment, (2) teacher development, (3) school improvement, (4) management and administration, and (5) coordination and monitoring and evaluation. The Educational Quality Improvement Program (GEQUIP) has been implemented in
order to assist in quality improvements within college of teacher education institutions. However, the Ministry of Education (MoE, 2004) also reported that the quality of teaching learning process in Ethiopian colleges was low. In the same way, National student assessments carried out in 2000 and 2004 at grades 4 and 8 levels indicated serious problems with quality, with overall low achievement in basic academic skills (National Organization of Examinations, 2004). In Nekemte college of teacher education (Tesfa, 2004), the input and process aspects of quality of education hinders the provision of quality training.

As stated by the Education Quality Improvement Program (EQUIP, 2008), in recent years, public confidence in teacher training colleges has decreased significantly due to heightened concerns over the skyrocketing number of higher education enrolments, costs and questionable learning outcomes. As a result, the value and effectiveness of the Ethiopian QA system has come into question. (EQUIP 2008).

This study is a critical analysis of the quality education in some selected teacher training colleges of Oromia regional State. It explores how teacher training colleges assure their quality education, to what extent they implement the quality aspects, the status of graduates in national competence assessment and major constraints that impeded the quality of teacher training institutions and how external and internal quality assurance systems are working in assuring the quality of teachers training college in Oromia regional state, the effects of the system on the quality of education. The knowledge gained from this study will help build a base of evidence that can be utilized in determining the strengths and weaknesses of the training colleges and identifying areas where change or improvement may be indicated. The research questions below form the basis of the study. The purpose of this study was to investigate the status of quality education in Oromia teachers training college. The focus was to maintain and raise the quality of education in teachers training colleges by encouraging policy makers in establishing effective quality mechanisms at institutional levels.

**Research Design and Methodology**

The Philosophical assumption for this study lies within the pragmatist paradigm, Mixed methods researchers looks to many approaches to collecting and analyzing data rather than subscribing to only one way (qualitative or quantitative). A mixed-methods strategy is defined as research in which the researcher collects and analyses data, integrates the findings, and draws inferences using both qualitative
and quantitative approach and methods in a single study or program of inquiry (Tashakkori and Creswell, 2007).

The mixed-methods strategy appears to be the most appropriate methodology for this study, given the purposes of the research, the research questions and the conditions in which this study took place. We found that mixed-methods research is often the best way to address the research questions in which we are currently interested. Therefore, our study of the status of quality education in west Wollega teachers training college employed various research techniques and data collection methods in order to move as close as possible to the core of the problem. We employed a mixed-methods approach to collect and analyzed data, integrate the findings, and draw inferences by using both qualitative and quantitative modes in this single study. The selection of descriptive survey study methods was based on our perception of the problem and the nature of the expected data to be collected. Survey design provides a quantitative or numerical description of trends, attitudes or opinions of the population by studying a sample of that population.

Samples and Sampling Techniques
From 12 Oromia Collage of teacher education, 4 collages (Jimma, Nekemte, Metu and Shambu) were purposely selected according to their proximity to the researchers’ working area and their generation or year of establishment. The 10% of instructors from each stream were selected randomly for they are in the same streams and the implementers of the same curriculum in the collage. Deans/ or Vice deans of sampled collage were also selected by availability sampling strategy, for they are the only managerial actors of the collage. In addition, laboratory technicians and Library heads also purposely selected because they are the only sources of information about the use and availability of laboratory materials and reference materials.

Data Collection Instruments
Questionnaires: The use of questionnaire as an instrument of collecting data for survey study is widely accepted (Wilson and McLean, 1994) for collecting information, providing structured, often numerical data, being able to be administered without the presence of the researcher, and often being comparatively straight forward to analyze. To this end, both open and closed-ended items of questionnaire were used to collect relevant information from respondents. From four teachers training college 84 instructors were participated in filling questionnaire. The 84 questionnaires (100 %) were returned.
**Interview:** Henning (2004) believes that the main aim of an interview is to find out what individuals think, feel and do and what they have to say. The interview looks at what people have to say about their feelings, experience and thoughts. The focus of these individual semi-structured interviews was on the status of quality education in Oromia teachers training college, how they assure their quality education, how they develop, revise and evaluate curriculum and the major challenges faced teachers training college to maintain their quality education.

We read and re-read the qualitative data collected for this study from interviewees and divided the data into meaningful analytical units (segmenting the data). The narrative data came from a variety of source such as college documents, and college deans through interview. Initial themes generated from interview transcripts were listed in the form of single words, phrases and statements. These themes were organized and combined, and related themes categorized by our own descriptive phrases or chosen words and key phrases from the text. Categories were merged both from the data and previous related studies.

After main themes emerged, themes that appeared in all sample colleges were selected and categorized according to the research questions, individual common themes from all sample teachers training college were combined together and finally large super categories that combined several categories from more specific categories to larger ideas and concepts were analyzed and interpreted by using quotations and people’s ideas and feelings described in a summary form.

**Document Analysis:** In this study, in addition to the information obtained from the respondents with reference to questionnaire and interview, document analysis was conducted on government policies, strategic plans, curriculum, research activities, COC results, Laboratory documents and other documents.

The quantitative data obtained from questionnaire was first edited, categorized and tabulated, and finally described by using various statistical techniques. Data gathered through the closed ended questionnaire was analyzed using both descriptive statistics. Percentage, Mean and one way ANOVA were used to analyze the quantitative data so as to see the statistical difference in quality education among the sampled colleges. The data gathered through interviews and document analysis, thematic analysis techniques were used to analyze qualitative part.
Results and Discussion

The intention of this study was to investigate the status of quality education in teachers training colleges, how teachers' training colleges maintain their quality education, the role played by the concerned body and challenges faced teachers training colleges in maintaining quality education. The data drawn from documents, interview data from key informants (KIs) and survey questionnaire is reported principally from combined data, which was derived from college deans, stream heads, instructors, laboratory technicians and library heads.

The guiding questions of this study were What mechanisms are used by teacher training college to assure the quality of Education in their institution?, To what extent the quality aspects are implemented in teachers training colleges to maintain the quality of Education?, What is the current competence status of college teacher trainees as assessed by Oromia regional state Center of Competence? Is there a difference among Colleges of teacher educations in maintaining the quality of Education? And what are the major constraints impeding the quality of education in the Colleges of teacher Education?

Infrastructures and Learning Resources

Having well organized infrastructures and sufficient learning resources (input) can positively contribute to the quality of education in teachers training colleges. Data was gathered from respondents through questionnaire by using a Likert scale having three agreement levels such as; Good =2, Satisfactory =1, Poor = 0.

![Figure 1: Infrastructure and Learning Resources](image-url)
As indicated in graph I, the institutions have sufficient resources and physical infrastructure ($M=1.28$) and adequate finance support ($M=1.4$) can facilitate to the quality statuses of the teaching learning. However, library resources ($M=0.96$), first aid clinic and counseling services with available rooms ($M=0.56$), computer facilities and internet access for students ($M=0.67$) and learning facilities such as course materials, up-to-dated books, references ($M=0.9$) are the greater inhibiter to the effective and quality of teaching learning at the college level.

With regard to infrastructure and learning resources like library, laboratory and ICT services, the researchers observed the laboratory rooms, chemicals in the laboratory, lab equipments’, computers, libraries and reference materials in the library. In addition, an interview was conducted with laboratory technicians and library and ICT heads. All laboratory technicians in four teachers training college were BSc holders in laboratory field (they were graduates of the university) ; in all sample teachers training college Biology, chemistry and physics laboratories were established, Technicians also assigned for each laboratories; laboratory equipments like Biker, Digital pH meter, Funnels’, Flask, Distillations, Science kit and a few chemicals were available in the laboratory.

The laboratory technicians from all teachers training college assert that, even though laboratories, laboratory technicians, laboratory equipments and some chemicals are available in the college because of the following problems like:

- The absence of adequate laboratory chemicals
- Absence of water in laboratory classroom
- Absence of Budgets to buy chemicals
- Absence of dark space to store chemicals, chemicals expire because they are stored in inappropriate place
- Inadequacy of laboratory materials
- The salary of laboratory technicians is low - this discouraged them not to work effectively.

The science laboratories which are established at college level were not working effectively; the trainees are not exercising laboratory activities during the laboratory sessions, one KI said that,

We are sitting in the laboratory classroom without any work; students are not practicing laboratory activities; 40-50 students come to laboratory sessions at
once; laboratory equipments are not adequate; this is wastage of time. He further elaborated that “science kit” is one of the most important laboratory equipment used by primary school teachers for laboratory work. However, because of inadequate practices made at college level graduates not be able to use science kit at primary school level when they engaged in teaching profession.

Librarians together with teaching staff and teaching facilities and equipments, are the “three backbones” for college education. In college of education, libraries are the extension of class teaching. They are the second class for students. Libraries help college students to improve and expand their knowledge by rich stored resources, creating a quiet and harmonious study fields with elegant and nice environment, and civilized reading atmosphere. Data was gathered from ICT and library heads of all sample teachers training colleges regarding how they provide services to students and the availability of reference materials and computer services. According the view of KIs there was mismatch between the numbers of students in the college and availability of reference materials. 5-6 students share one reference materials together, they take notes together in the library, their ratio is 1: 10, many of the reference materials are 3, 4, and 5 in number, students had no chance to read the reference materials alone, there was no light in the library (exceptional to Shambu teachers training college), no in ternate access and insufficient computers.

From the above data we can conclude that library resources (M=0.96), first aid clinic and counseling services with available rooms (M= 0.56), computing facilities and internet access for students (M= 0.67) and learning facilities such as course materials, up-to-dated books and references materials were not adequate. In all sample teachers training colleges Biology, chemistry and physics laboratories were established, Technicians also assigned for each laboratory; laboratory equipments like Beker, Digital pH meter, Funnels’, Flask, Distillations, Science kit and a few chemicals were available in the laboratory. However, the established laboratories were not working effectively; the trainees are not exercising laboratory activities during the laboratory sessions, chemicals also not adequate. Besides, there was mismatch between the numbers of students in the college and availability of reference materials. 5-6 students share one reference materials together; they take notes together in the library.
Curriculum Development, Revision and Evaluation

One of the most crucial elements determining the quality of student learning is the quality of the academic programs or courses of study that students go through. The initiation of a new program can start anywhere (from students, stakeholders, departmental council, academic commission or the government). The curriculum design (redesign) is done in a structured way, involving all stakeholders, there is a well functioning curriculum committee, the curriculum is regularly evaluated, revision of the curriculum takes place at a reasonable time period and quality assurance of the curriculum is adequate (DAAD, 2010).

Colleges have responsible for the program in sufficient autonomy to develop, revise, evaluate and re-plan the curriculum in line with the global world so as to update the program in line with the regional requirements (regional culture, history, like Gada system, Erecha) and needs of the students and stockholders. The study indicates that curricular activities are surely had got less emphasis to go with the primary schools as indicated in the overall mean score (M=2.33). Yet, the instructors have the right mandate to implement the already developed curriculum at national level by translating in to the regional language.

An interview was made with Oromia Education Bureau curriculum experts, college deans and stream heads regarding curriculum development, revision and evaluation. Accordingly, they stated that when the MoE want to change or revise the existing curriculum, experts from MoE sent to some developed countries to select the modality or to share experiences. Based on this experience the MOE call all college deans and some subject teachers from all teachers training college and discuss about the new curriculum, prepare course catalogue (decide course topics) and set the framework (modular approach). Based on the agreed course catalogue or the direction given by MoE, regional education Bureaus’ determine pre-requisite courses, sequence semester distribution of the courses, course credit hours, duration of the training, entry and graduation requirements, the preparation of course modules and determine for which college they distribute the preparation of course modules for each subject matter. Finally, Oromia Education bureau invite college deans, subject matter instructors and curriculum experts from teachers training college and from the region for validation of the module. According to their view, there had been no curriculum development, revision and evaluation processes/mechanism at college level, no curriculum review and evaluation committee at teachers training college, external stakeholders were not involved.
during the validation of the modules, the needs of the society and learners and instructors have been not assessed before the development of the curriculum, the curriculum has been not evaluated on a regular basis, the curricula are evaluated / revised based on the interest of the MOE.

One KI from the college deans commented on the idea as follows:

*In a reality, a number of curricula have been developed by MoE for teachers training college in different modalities, many course modules also prepared by subject matter teachers. Most of the curriculums / modules copied from previous materials, copied or adopted from other countries curriculum. College instructors do not give much attention to the preparation of Modules; they give short time to do the work. This has a negative impact on the quality of the curriculum. There is no standard at national level and institution levels by which we can check the quality of the curriculum.*

In general, the quantitative and the qualitative data confirmed that the mandate to develop and revise the existing curriculum has been given to MoE; there was no formally established mechanism to evaluate the working curriculum at college level. The institutions have the mandate to implement the already developed curriculum at national level by translating in to the regional language; curricular activities are not in line with primary schools curriculum. Its relevance in solving societal problems is also questionable.

**The Teaching - Learning Process**

Apart from quality assuring program development, the rigor of the teaching and learning practices of an institution determine quality of delivery. This is considered the cutting edge of an educational institution because that is what influences students’ learning. Academic audits have placed attention to the enhancement of teaching and learning on institutional agendas. They have also helped to clarify responsibility for improving quality in teaching and learning at individual, academic unit, faculty and institutional level (Dill, 2000: 23).

The research findings indicated that college instructors were highly committed to implement the curriculum using student-centered teaching methods (M=2.47) and assess their students learning out comes with appropriate feedback (M=2.47) using formative, and summative assessment in their particular subject. In the same way, the teaching learning of the collages have been greatly facilitated through
engaging students on practical experience ($M=2.31$) and student counselling and support system to maximize their academic performance ($M=2.02$) so as to enhance the quality of education in the college.

The interview result indicates that the most common approaches employed in quality assuring teaching and learning in the case study institutions entail monitoring and assessment of staff by department as well as student evaluation, implementing active learning teaching approaches, student counseling, providing tutorial classes and student assignments. Active learning teaching approaches are perceived as philosophy by all case study institutions as mandatory. Their efforts to make teaching and learning active are mainly realized through employing of different active learning methods.

Although the learner-centered approach is the philosophy of all case study teachers training college, every instructor is expected to use active learning teaching methods, whereas the dominant form of teaching is also the gaped-lecture method. The reasons were stated by one KI from Nekemte teachers training college as follows: “Staff spoke of having no option rather than using gaped-lecture method and lecture as class size are large. In some cases student number is larger than what is expected. Most teaching comprises lecture presentations supported by the use of chalkboard and more rarely whiteboards”. All case study institutions pursued the policy of continuous assessment. They had their own processes and procedures in implementing continuous assessment in their respective institutions. The type of continuous assessment used by the case study institutions seemed very similar i.e. mid examination 20 %, Continuous assessment 40 % and is final examination is also 40 %. However, the extent that an institution implements continuous assessment was uniform. Team – based learning also another widely used mechanism by all case study institutions to improve the quality of students learning. According to the view of college deans and stream heads 1-5 team- based students learning plays a great role in a teaching – learning process of teachers training college. Students were arranged in to 1-5 teams, they were working assignments together and exercise class work in the classroom.

Quality assurance activities involving the development of explicit quality assurance policies, the establishment of quality assurance structures (in the form of quality assurance offices or ad-hock committee) and the regular evaluation of institutional performance are common features of higher education systems in most parts of the
These developments are taking place at institutional as well as at national level. In most Ethiopian public and private higher education institutions, internal quality assurance systems are established. Internal and external quality evaluations are started. According to the view of college deans there were no internal quality assurance systems which evaluates the quality of teaching – learning process in all teachers training college, even there was no ad-hoc committee in the institution. HERQA has a mandate to conduct external quality audit with other higher education institutions but still their institution was not evaluated by HERQA.

Research Development and Outreach Activities

One of the criteria for judging the quality of teachers training college performance is the level of research output, both in terms of quantity and quality. The data was gathered by questionnaire through a Likert scale having five agreement levels such as 5= All of the time, 4=Most of the time, 3= some time, 2= Not often, 1=Never.

Table 1 indicates the one way ANOVA analysis among the colleges of teacher education in their research development and outreach activities. The result (F>0.02, df =3 and P>0.05) revealed that there were statistically no differences among college of teachers’ education in research practices and output such as availability of adequate facility, budget, and clearly set research agenda for academic staff, publishing research report, community service activities, opportunity for active participation in national and international research conferences.

Graph 2 shows that research involvement of Jimma College of teacher education, Nekemte college of teacher education, Metu college of teacher education and Shambu college of teacher education with mean score M = 1.89, M =1.79, M =1.68 and M =1.92 respectively. This implies that there are mean difference among the colleges and Jimma and Shambu College of education are relatively at better position than Metu and Nekemte College of teacher education. Similarly, the overall mean score (M=1.82) shows that instructors in all colleges were at very poor level in practicing research and outreach activities.
**Table 1**: One Way ANOVA of Research Development & Publication of the colleges

<table>
<thead>
<tr>
<th>No</th>
<th>Items</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>P-Value</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Between Groups</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Within Groups</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1</td>
<td>Availability of adequate facility, budget and co-ordinator to support research.</td>
<td>1.674</td>
<td>.55</td>
<td>.43</td>
<td>.73</td>
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<td></td>
<td></td>
<td>103.31</td>
<td>1.29</td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>Availability of clearly set research agenda for academic staff as well as to students</td>
<td>3.355</td>
<td>1.11</td>
<td>1.02</td>
<td>.38</td>
</tr>
<tr>
<td></td>
<td></td>
<td>87.53</td>
<td>1.09</td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td>The college produces/Publishes research report and research articles</td>
<td>1.596</td>
<td>.53</td>
<td>.82</td>
<td>.48</td>
</tr>
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<td></td>
<td></td>
<td>51.39</td>
<td>.64</td>
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<tr>
<td>4</td>
<td>Research and community service activities are taken into consideration in appointment and promotion exercises</td>
<td>2.31</td>
<td>.77</td>
<td>.81</td>
<td>.49</td>
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<td></td>
<td></td>
<td>75.24</td>
<td>.941</td>
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<tr>
<td>5</td>
<td>The opportunity for active participation of staff in relevant professional conferences, seminars, workshops and other academic activities at national, regional and international levels</td>
<td>2.05</td>
<td>.68</td>
<td>1.11</td>
<td>.34</td>
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<td></td>
<td></td>
<td>67.75</td>
<td>.77</td>
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<td>6</td>
<td>National and international recognition of academic staff members (e.g., journal editorship, service as peer reviewers, consultancy, and expert group and committee membership)</td>
<td>2.57</td>
<td>.85</td>
<td>.202</td>
<td>.89</td>
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<td></td>
<td></td>
<td>61.66</td>
<td>.77</td>
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<tr>
<td>7</td>
<td>Integration of research outputs into teaching/learning</td>
<td>.44</td>
<td>.14</td>
<td>.202</td>
<td>.89</td>
</tr>
<tr>
<td></td>
<td></td>
<td>58.22</td>
<td>.72</td>
<td></td>
<td></td>
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<tr>
<td>8</td>
<td>The college serves the community in social issues, gender disparities, effective teaching learning, inclusive education, educational leadership, research outputs and other issues</td>
<td>3.94</td>
<td>1.31</td>
<td>.449</td>
<td>.718</td>
</tr>
<tr>
<td></td>
<td></td>
<td>233.86</td>
<td>2.92</td>
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</table>
In addition to quantitative data, qualitative data also gathered from college deans and stream heads. All four teacher training college had policies and guidelines that encouraged research and publishing by the staff. The policy states that in a teacher training college, the teaching staff should be engaged 75% on teaching-learning activities and 25% on research and outreach activities. However, there had been no research conducted and published by academic staff throughout the last three years, there was no research output published by all Teacher training college, only an action research were conducted by HDP candidates. One of the reasons raised by college deans were the absence of budget and absence of formal structure for promotion at college level. In general, as we can understand from the qualitative and quantitative data, there was no significance difference among colleges in producing research out. Therefore, Oromia Regional Education Bureau and college deans should take actions to engage academic staff on research and outreach activities.

Figure 2: Mean score of Research Development and publication of the colleges

Figure 3: COC results of Oromia Teachers Training College (2007-2008 E.C)
Competency based assessment is the process of collecting evidence about one’s knowledge, skill and attitude in order to make judgments whether employers are benefited from competence based assessment because they use the assessment result for hiring and promotion of workers. It is ascertaining that the workers are competent and are equipped with safe work practices (COC, 2011). In Ethiopian context, the Teachers training college COC test is administered to the graduates by every regional Education Bureaus through its occupational competency assessment and certification center. At the end of competence based assessment, results are rerated or responded as either competent or not yet competent based on the information or evidence gathered using assessment tools which basically include both knowledge and practical tests. To gain the competent rating, a candidate must score at least 50% of the total points in the knowledge test and must successfully accomplish all the required tasks/projects in practical test being competent means having skills, knowledge and attitude on the part of graduates to do the required job successfully and understanding why they work. COC assessment has a meaning for Teachers training college programs because the effectiveness of the program is determined based on COC assessment result. It is only when a graduate is successful in the test that he/she will be certified and is able to be employed or get employment opportunity. The COC test is based on the Ethiopian Qualification Framework already developed at the national level (OCOC, 2011).

As indicated on graph III, 3.8 %, 3.4 %, 30 % and 0.7 % of graduates from Jimma, Nekemte, Metu and Shambu Teachers training college scored <50 % respectively. 55 %, 51 %, 45 % and 56 % of graduates scored 50 – 70 %, furthermore 21 %, 30.5 %, 4.2 and 3.2 % of the graduates scored > 70 % from Jimma, Nekemte, Metu and Shambu Teachers training college respectively.

The researchers have made an interview with the head of Oromia center of competence assessment department about the process of competence assessment, how they provide certificate and engage them on a teaching profession?. He stated that according to the policy set by MOE and REBs’ center of competence assessment (COC) should include theoretical and practical aspects, the theoretical aspect consists of 80 % and the practical accounts 20 % .Those who successfully passed the COC join the teaching profession (will be employed as primary school teacher) and those who failed COC will get a chance to take re-examination for a maximum of three times and will not be employed as a primary
school teacher until he/she pass the examination. But the COC examination which has been given to the graduate of teacher training college had focused on theoretical / knowledge aspect, the COC on practical aspect was not given to the graduates (as per the police), those who failed COC also employed as a primary school teacher. According to the view of the interviewees the reasons why those who failed COC employed as a teacher were shortage of teachers in primary schools and have the assumption that graduates could complement their knowledge gap by practicing continuous professional development in schools.

From the data we can infer that about 77 %, 81 %, 59.2 % and 49.2 % of graduates were passed COC from Jimma, Nekemte, Shambu and Metu teachers training colleges respectively. On the other hand 3.8 %, 3.4%, 0.7 % and 30 % were not successfully passed COC i.e., they scored less than 50 %. Even though COC for graduates of teachers training college started in 2004 E.C, still the practical aspect is not considered, those who failed COC also employed in a teaching profession. Therefore, there is a gap between what the policy stipulate and the implementation on the ground.

**Major Challenges that Affects Quality of Education**

There is no doubt that there would be factors that affect the quality of education. The factors may be emanated from different variables which may relate to teachers, intuition, leaders, students...etc. Regarding this, closed-ended questions were given for teachers so as to rate the degrees to major variables affecting the quality of education at college level. The agreement levels were Very high =5; high = 4; Medium =3; Low =2 and Very low =1.

![Figure 4: Factors that challenges quality education](image-url)
Graph IV illustrates that the intuitional support and commitment for quality of education (M = 2.98) is the minimum contributor to affect the quality of education. Government intervention in internal affairs of institutions (M = 3.59), low payment for academic staff for the extra-teaching load (M = 3.8), modality (leaner, cluster, focus, generalist) of the program/curriculum quality (M = 3.34), commitment and support of academic community for quality, (M = 3.64), absence of internal quality assurance system (M = 3.5), commitment and engagement of students for their learning, students are living off-campus (M = 3.45) and lack of experience in conducting research (M = 3.04).

The interview participants from the four teachers’ training college underlined that, the absence of reference materials in the library, Commitment of instructor-most of the time they compare themselves with the incentive given to university instructors, Readiness of learners to read and do much - they need short cut achievement and back ground of the learners. In general, the major factors that impeded the quality of education in case study institutions focus on the following issues:

**Poor Facilities and Equipment:** This manifests inadequate and poor state of laboratories, and libraries and internet services. The provision of the relevant educational facilities and equipment is vital in the provision of quality educational services to all students in the colleges of education. However, the poor state of facilities and equipment has been a major challenge to academic quality assurance in the college of education.

**Examination Malpractice:** Examination malpractice has undergone various forms and sophistication. Common examples are impersonation, bringing prepared notes and textbooks into the examination hall, bringing information on items of clothing and currency notes, bribing invigilators and supervisors etc.

**Quality of Students:** These days, the quality of students admitted into the system is low. This is because their preparation at the primary and secondary levels was poor, automatics promotion and many of them passed their examination by relying heavily on examination malpractice, students lack the culture of hard work. It becomes difficult to get students to learn, to investigate, to research to engage in independent study. The bottom line is that the quality and standard of students are no longer assured.

**Commitment of Academic Staff:** the commitment of academic staff also contributes to quality education. Their commitment to support and advice the
learners, update their subject matter knowledge, use variety of teaching methods, engage learners on teaching learning activities, encourage independent work is very essential. However, majority of the instructors were discouraged because scholarship beyond masters qualification was not allowed for them, there was no adequate fund to conduct research, there was no promotion from assistant professor to associate and professorship (absence of scholarship).

In general, Poor Facilities and Equipment, Examination Malpractice, Quality of Students, Commitment of academic staff, low payment for academic staff for the extra–teaching load, commitment and support of academic community for quality, government intervention in internal affairs of institutions, and absence of internal quality assurance system were the major factors that influenced the quality of teachers training college. The degree of seriousness of the problem does not vary from one institution to another institution. Although the seriousness of the problem does not vary from institutions to institutions, we can infer from the data that the four most influential factors affecting the quality of education in four case study institutions were Poor Facilities and Equipment, Quality of Students, low payment for academic staff for the extra–teaching load and commitment and support of academic community for quality.

Conclusions
The quantity vs. quality paradox in the expansion of higher education is a crucial issue in Ethiopia. The fact that the quality of education is growing inversely proportional to the increased expansion of higher-level public and private education is also recognized by the government of Ethiopia. The Education Quality Improvement Program (EQUIP) is one of several Dutch projects helping develop higher education in Ethiopia. Over a four-year period (2005-2008), its aim is to maintain the quality of teacher training college. Quality and relevance education creates graduates whose training matches the needs of their chosen careers, the demands in the world of work and the national priorities. Concurrent with the EQUIP project has been the creation of a national higher education relevance and quality agency which was started to carry out external audits in the public higher education institutions. The research findings of the study show that all case study institutions have clear visions, mission and goals, adopted professional and managerial approaches and relatively adequate financial resources, so as to run the quality of education in the colleges. However, the employees and leadership commitment to improve student learning were not up to the standard. This negatively affects the
quality of education in teachers training college. College deans, Laboratory
technicians and ICT and Library heads reported that in all sample teachers training
college Biology, chemistry and physics laboratories were established, Technicians
also assigned for each laboratories. However, the established laboratories were not
working effectively; the trainees were not exercising laboratory activities during the
laboratory sessions, chemicals also not adequate. Besides, there was mismatch
between the numbers of students in college and availability of reference materials.

Documents and interview results from all case study institutions confirmed that all
case studies TTC had useful teaching and learning delivery policies and guidelines.
The studied institutions place a lot of emphasis on this aspect of college activities.
The most common approaches employed in quality assuring teaching and learning
in the case study institutions entail monitoring and assessment of staff by
department as well as student evaluation, implementing active learning
approaches, student advice, providing tutorial classes and student assignments.
Active learning teaching approaches are perceived by the case study institutions as
mandatory. All case study institutions pursued the policy of continuous assessment.
They had their own processes and procedures in implementing continuous
assessment in their respective institutions. The type of continuous assessment
used by the case study institutions seemed very similar i.e. mid examination 20 %,
Continuous assessment 40 % and 40 % is final examination. However, the extent
that an institution implements continuous assessment not varies from institution to
institution.

The Oromia education bureau curriculum experts, college deans, and stream heads
stated that, curriculum has been not evaluated on a regular basis; the curricula are
evaluated / revised based on the interest of the MoE. The MoE was the only
responsible body to initiate the development of new curriculum and to revise the
existing curriculum. The mandate of the TTC has been participating on curriculum
development and revision conference when they are invited by MoE and prepare
modules based on the curriculum framework set by MoE. Validation of course
modules takes place at Oromia Education Bureau in conjunction with Teachers
training college. The research conducted and published by academic staff in all
teachers training college was not adequate throughout the last three years. One of
the reasons raised by college deans were the absence of budget and absence of
formal structure for academic promotion at college level. the major factors that
significantly influenced the quality of education in teachers training college were
Poor Facilities and Equipment, Examination Malpractice, Quality of Students, Commitment of academic staff, low payment for academic staff for the extra – teaching load, commitment and support of academic community for quality, government intervention in internal affairs of institutions, and absence of internal quality assurance system.

References


Development of Blended Learning Pedagogy for Mathematics Courses in Ethiopian Higher Education: A Case Study in Wachemo University

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Abstract

Currently, our world is experiencing scientific and technological changes, but the traditional methods are relatively unable to cope with these changes. So far the impact of instructional technology on students learning is not consistent. This indicates the need for intensive investigation whether the difference is due to contextual factors, such as instructional design problem, infrastructure, mismatch between students need and competency. This study therefore aimed at assessing the needs of students and identifies the ingredients accordingly for a plausible development of blended learning course in Ethiopian context. To achieve the goal of this study, exploratory case study design was adapted. Participants included 27 mathematics students of Wachemo University. Additionally, based on the data obtained from the department of mathematics, six students comprising different achiever level and gender were interviewed to obtain the views of the diverse nature of students. Questionnaire, semi-structured interview and non-participatory observation were used to collect the data. Results indicated that the current challenge that participants raised and calls for the improvement were: lack of reference materials, mismatch between the course content and listed references, lack of local learning resources, insufficient explanation of the existing references, lack of tutorial classes and instructor speed. Among the participants of the study, 66\% reported that they have an experience in accessing the internet for educational purpose to supplement their learning. But, there are limitations in email communications. It was suggested that supplemental blended learning model with step by step execution of enabler, enhancement and transformational nature might fit with the current need and state of students. Based on the findings of the study, imperative implications for practice and future research were made.

Keywords: blended learning design, students’ need, social constructivism, supplemental model, e-learning.
Introduction

Computer has been becoming a need in everyday life; it is not a luxury as it is in previous years (Ramakrisnan, Yahya, Hasrol and Aziz, 2011). Students especially in higher education depend on computer to do course task at least to write their senior essay. It is therefore, evident to say higher education institutions are aware of the importance of technology in enhancing students experience and knowledge.

Technology refers to the use of computer in learning. However, in developing countries like Ethiopia, technology is not used to enhance the learning process to a considerable extent at all stages.

Any educational program aims to change the human behavior in order to adapt to the changing environment. So, maintaining quality education will bring about changes in the development of society and nation at large. However, quality of education in Ethiopia, as indicated in successive national learning assessments by the National Educational Assessment and Examinations Agency (NEAEA, 2014), is still a crucial challenge, since the achievement of students in mathematics is low and also declining. To minimize such crumple especially to improve science and mathematics instruction, research shows developing new pedagogical approaches as one of the solutions (Eshetu, Dilamo, Ayele and Zinabu, 2009).

Though blended learning showed effective ways in education and training in the last two decades (Al-Ghassani, Shamsi, Islam, Al-Salti and Al-Hasni, 2015), in Ethiopia the practice of blended learning is not yet taken as an alternative. Currently, our world is experiencing scientific and technological changes, but, the traditional methods are relatively unable to cope with these changes (Alotaibi, 2013). Despite its advantages, technology has some shortcomings represented dependency among students and the killing of time on non-useful activities. Hence, the new model called Blended Learning (BL) combines some characteristics of both traditional learning and technology based learning which can overcome the disadvantages of both kinds of learning. It combines the traditional face-to-face learning environments with the information technology and telecommunications (Graham, 2009; Kitchenham, 2011). Blended learning is further described by (Thorne, 2003) as a way of meeting the challenges of tailoring learning and development to the needs of individuals by integrating the innovative and technological advances offered by online learning with the interaction and participation offered in the best of traditional learning.
The online learning environment ensures the flexibility and effectiveness which cannot be found in a classroom environment, whereas face-to-face learning environment provides the social interaction which is required for learning (Akkoyunlu and Soylu, 2008). Employing only educational technologies in the classroom is not blended learning rather it is taken as e-learning. More importantly, the method guarantees the ease of communication with students as well as providing them with all useful materials of the course (Alotaibi, 2013). Since definitions vary in the literature, blended learning is defined in this article as a combination of face-to-face and web based environment which is similar to Akkoyunlu and Soylu (2008) and Graham (2009).

**Problem Statement**

Inspiration for this research arises as a response to one of the central issue recognized nationally, that the current trend is not on the way of achieving its goal (NEAEA, 2014), Eshetu, et al., (2009) the decline in achievement, the need for developing new pedagogical approaches to improve science and mathematics instruction (Eshetu et al., 2009) and the contemporary movement towards technology, which gives a clue for the need to do something. In addition, determining an effective system to meet the demands of improved learning in a growing technology age takes a priority. This is because; the emergences of technology have expanded the possibilities for distributed communication and interaction which urges schools to do so; because, students get technological tools at their early age and they trust it as a knowledge base and believe on its ease of communication. Students today expect school to be as technology rich as the world around them. Thus, it is decisive to relate the latest thinking to the way mathematics is taught and learned.

A study conducted in Dire-Dawa University also shows the low level of students’ mathematical competency (Tadese, 2014). This study further shows students’ average score on Ethiopian University entrance examination falls from 41.11 in 2008 to 38.55 in 2011. Showing the poor mathematical backgrounds of students join Dire-Dawa University. Without loss of generality, this notion is exactly the same for other universities in Ethiopia. Students’ achievement is found to be low and the main areas of mathematics in which students fail to achieve include applications of derivative, partial derivatives, matrix operations and solving system of linear equation (Tadese, 2014).
The current rapid emergence of technological innovations has a huge impact on the possibilities for web learning and inclination towards technological innovations to solve problems. But still in Ethiopia, schools are not well aligned with emerging technological innovations. This issue should be taken into account when developing a technology intensive learning environment.

Upon my experience and observation, the current teaching and learning practice in Ethiopia at all stages of schooling is transmissive rather than interactive, though the education policy calls for interactivity (TGE, 1994). Hence, blended learning builds the foundation for effective pedagogical practice (Graham, 2009).

Launching blended courses and programs should be in light of the general favorable needs of students (Calderon, Ginsberg and Ciabocchi, 2012), and assessment is the most pervasive issue in designing a deep and meaningful learning experience (Garrison and Vaughan, 2008). What problem does blended learning solve? Why would we want to move instruction out of the classroom and put some, but not all of it into an online format? What are the benefits? What are the losses? These are some of the questions that need due consideration while developing blended learning environment. Thus, based on the needs of students and local conditions of infrastructure, it is possible to design good blended courses and/or programs. This study therefore aimed at assessing the needs of students and identifying the ingredients for a possible blended learning course in Ethiopian context.

**Materials and Methods**

To achieve the goal of this study, exploratory case study design was adapted. This method is relevant for obtaining extensive and in-depth description of a phenomenon at hand (Yin, 2003). It is also a best method when the nature of research questions requires exploration. In this research, the major case was students’ need. But, the design involves more than one unit of analysis; this is because within single case, attention is also given to a subunit (local condition). So, the design was embedded unitary case analysis as shown in figure1 below:
Participants and Sampling
The participants of this study were second year mathematics students in Wachemo University during the academic year 2016/2017. Since, the target population was small (N=28); all students were involved to complete the questionnaire. With unknown reason one student failed to complete the questionnaire. Hence, the sample comprises twenty seven students (male=13, female=14). On the other hand six students were purposely selected for the interview. Based on the data obtained from the department of mathematics these interviewees comprise different achiever level and gender. This is to obtain the views of the diverse nature of students.

Data Collection Instruments
Questionnaire, semi-structured interview and non-participatory observation were used as a data collection instrument for this study. The goal of my observation was to examine the existing local context and availability of infrastructure for blended learning, in line with the purpose of the study. Non-participant observation involves observing without actively participating. This option is used to understand a phenomenon by entering the community or social system involved, while staying separate from the activities being observed (Flick, 2006). Interviews on the other hand are particularly useful for getting the story behind a participant’s experiences and pursue in-depth information around the topic being studied and the researcher has the opportunity to examine or ask follow up questions (Berg, 2001).

Trustworthiness and Dependability
According to Guba and Lincoln (1985), the basic question addressed in qualitative research is "How can an inquirer persuade his/her audiences that the research
findings of an inquiry are worth paying attention to?" Trustworthiness is the conceptual soundness of the research results and is influenced by the notions of credibility, transferability, dependability and conformability (Guba& Lincoln, 1985). When a new member is introduced into the community being studied, reactive effects can occur (Brink, 1993). That is participants may behave abnormally and distort some information. So to tackle this issue, I tried to create a sense of trust. Moreover, I used open and closed ended questionnaire as well as interviews. The interview was audio recorded by permission and detailed field note has been taken to examine the variations in responses and then I compared results.

To allow my audiences assess the extent to which proper research practices have been followed and pose their own generalization to their particular context, I thoroughly described the procedures from the beginning to the end, which ensures dependability. Credibility on the other hand is about the congruency of the findings with reality and so ensuring credibility is one of the most important factors in establishing trustworthiness. To ensure this I used different data collection methods such as observation, open and closed ended questionnaire and interview.

**Method of Data Analysis**

Qualitative research studies involve a continuous interplay between data collection and analysis (Yin, 2011). For this reason, I began analyzing data following the questionnaire administration to begin identifying patterns, and to facilitate the interview. To analyze the data, cross case analysis was employed; since Cross-case analysis facilitates the comparison of commonalities and differences in the events, activities, and processes or the units of analyses (Cruzes, Dybå, Runeson, and Höst, 2014). Specifically, the two cases were examined and a case matrix developed to include the major concepts of the research (students’ need and local conditions). Finally, a cross-case matrix was developed to compare data from the two cases and to look for general results as to produce plausible blended learning model.

**Research Findings**

The focus of this study was to ascertain the needs of students’ and identify the ingredients for a plausible blended learning course in Ethiopian context. Results of the informant data in this study revealed several themes perspectives of students’ need and local conditions.
Students Current Need in the Learning Process

Before designing and implementing blended learning, there is a need to build consensus with teachers and students as to why a blended learning approach is beneficial to them. A blended learning initiative could require institutional change, reallocation of funding, or demands on limited space so it is important to have transparency and understanding to avoid quarrel and promote benefits (Delialioglu and Yildirim, 2008; Shea, 2007). To assess students’ current need, different questions were raised by the researcher to obtain a comprehensive data about the issue.

On the questionnaire, students report the following as the current challenge and calls for improvement; lack of reference materials (82%) and inability to go with the speed of the instructor (34%). Additionally, participants also mentioned the mismatch between the listed references and the course content and librarians’ inability to provide the requested material. To confirm these results, the same question was raised during the interview. Regarding the current limitation and future needs one participant responded as follows: “the reference book listed in the reference does not comply with the course content and sometimes if it exists, it is in a limited number and unavailable when asking the librarian. Because of this we are striving to take all notes in the classroom and unable to go with the speed of the instructor”. All participants expressed this situation as a problem in their learning and calls for availing all important references and also building librarians’ skills to support them.

Students were also asked to list all aspects that help to strengthen their learning of mathematics course. Accordingly, students mention collection of previous exams and worksheets, instructor lecture note, solved problems, collection of learning resources, as well as good assistance from the instructor. Students disagree with the total absence of the instructor in a computer mediated mathematics course. One participant replied as “if a computer mediated instruction is to be introduced using computers or internet, it should be with the help and close supervision of the instructor both in the classroom and computer lab. Lined up to this, another participant replied as “the presence of the instructor is crucial since mathematics needs deep explanation to understand. Another thing what I want to add is the smartness and preciseness of the online content”. The preciseness of the content is important not only in the online environment but also in the offline classrooms. So, ensuring that the facts delivered could be easily understood as compared to the
previous method is the forefront issue. Some students may disregard e-learning due to resist to change or afraid of technology (Ramakrisnan et al., 2011). So, the blended learning model should encompass this entire flaw.

In a technologically naive society, like in Ethiopia, students’ skill in computer usage might be one of the challenges for the resistance. Some students come from a rural school where there is no or limited computers and internet access. These students need time to cope up with the technology usage; this may affect their learning simply since they are new to computer. Particularly, in this study the target population is second year mathematics students. At this level students took three computer courses namely: introduction to computer, fundamentals of programming I, and fundamentals of data base system. So, it is evident to say that starting from the second semester of year I, students can acquire basic computer skills. Additionally, participants both in the questionnaire and interview addressed that they have acquired basic computer skill such as opening and shutting down computers, retrieving documents from the hard disk and writing some notes on Microsoft office word and excel. Participants also reported that they have an experience in accessing the internet through their smart phones and in the internet caffee for the purpose of communicating with virtual friends on the social media and sometimes to retrieve academic concepts. Among the participants in the questionnaire, 66% reported that they have an experience in accessing the internet for educational purpose to supplement their learning. But, there are limitations in email communications; all participants reported that they have limitations in communicating through email.

**Analysis of Local Conditions for a Blended Learning**

The worth of blended learning depends on its specific design, implementation and the particular problem for which it is designed to solve. An important component for a blended learning to be effective is therefore the current infrastructures which determine a foundation for blended learning. Infrastructure includes technological requirements that must be met for blended learning (Poon, 2013).

Having difficulty with technologies such as slow internet connections and shortage of computers is found to inhibit students' ability to engage in online discussion (King, 2002; Smyth, Houghton, Cooney and Casey, 2012; Tadesse, 2014). This issue should be a concern for a nation where there is limited internet speed like Ethiopia. This issue can be reduced by alternatively using the local server and more generally upgrading the speed of internet nationally and institutionally.
Another thing is the allocation of dedicated services to support students and facilitators throughout the development and implementation of blended learning (Garrison and Kanuka, 2004). This includes spending resources on communication to encourage instructors and prospective end-users to become actively involved and fully aware of blended learning initiatives (Garrison and Kanuka, 2004; Poon, 2013).

Furthermore, blended learning can be successfully implemented and students make use of it if the students have sufficient knowledge of, and are ready to use, the newly introduced technology (Poon, 2013). So, before initiating the program, students’ knowledge of computer and their competency need to be identified and assured. Regarding these issue participants of this study responded as follows: “we have motivation to learn using computers and our knowledge of computer will be improved through the computer courses that we are taking and through time when having an opportunity to practice”. Specially, Ethiopian government recognizes the benefits of educational technology and aimed to fulfill all infrastructures even in lower grades (MoE, 2015). Hence, designing good blended learning program and/or course takes priority to benefit from technology integration. Researchers have identified availability of resources as the most important factor for success when developing blended learning course (Poona, 2013). Not only infrastructure, human resources are also essential to develop a blended learning course for various disciplines.

The development of blended learning requires sufficient resources, including financial resources, time, effort, and expertise. The issue of effort and expertise may not be handled only by IT (Information Technology) personnel alone, since designing blended learning course requires subject matter knowledge as well. So, for effective, continuing development and evaluation of blended learning, teachers must be endowed with both technology and subject matter course. Thus, there is a need to revisit the existing teacher education curricula. It must be noted that high level content and specialized knowledge contribute little when the teacher lacks the general pedagogical skills required and technological skills which enable him to create conducive environment where learning can take place.

**Suggested Blended Learning Model**

The emergence of blended learning is based on pragmatic mixing of different method of teaching and learning. It can be seen as the application of two or more
methods or solutions to a learning need (Wilson and Smilanich, 2005). But, upon the emergence of technology, the mixing seems to shift towards mixing face-to-face and web-based learning environments. Its sole purpose is to assist the learning process not to replace classroom instruction. Hence, learning can be taken as a process of actively constructing knowledge and instruction is a supportive process, which assists in the construction of knowledge rather than communication of knowledge. Online communication tools allow for the establishment of a unique collaborative learning environment. One of the best and easy to manipulate e-learning tool developed based on social constructivist pedagogical principles is MOODLE (modular object oriented dynamic learning environment). Moodle was originally developed by Martin Dougiamas for the purpose of helping educators by creating online courses with a focus on interaction and collaborative construction of content (Moodle, 2016).

It is of vital importance to note that the process of learning can be best achieved if there is good environment, which is interactive for both the teacher and students. More importantly, the learning process should go in line with the technological advancements of that particular time. Blended learning is one of the strategies that aim to create conducive environment by combining the latest technology and face-to-face class room instruction. Although there is a wide discrepancy in blended learning practices that are occurring (Graham, 2006), the models can be categorized as activity level, course level, program level, or institutional level. Each of the four models are very clear because, their names indicate about the nature of the blend. For instance, activity level blending is when a learning activity contains both face-to-face and online elements. Course level blending on the other hand is used as part of a course, whereas program level is designed in a program such as diploma, degree, or faculty based such as social science, engineering, natural science and so on. The forth and the broadest blending occurs at an institution level, in which the full program in the institution is delivered through the blended approach. This type of blending requires organizational commitment and this is the final stage in the development of BL.

The nature of the blend can also be categorized as enabler, enhancement or transformational (Graham, 2009). The enable blends focus on addressing issues of access and convenience. For example, blends that are intended to provide additional flexibility to the learners or an attempt to provide the same opportunities or learning experience but through a different modality usually using technology.
Enhancement on the other hand allows incremental changes to the pedagogy, but do not radically change the way teaching and learning occur. For example, in a traditional face-to-face learning environment, additional resources and some supplementary materials may be included online.

But transformational blending allows a radical transformation of the pedagogy. An example for this is a change from a model where learners are just receivers of information to a model where learners actively construct knowledge through dynamic interactions (Graham, 2009). Graham argued that these types of blend enable intellectual activity that was not practically possible without the technology.

![Figure 2: Suggested blended learning](image)

A step by step use of enabler, enhancement and transformational blending model is important for students to testify the benefits of the blended learning. This model helps students to be familiar with the technology and easily manipulate the required elements through time. Based on the needs of participants the ingredients in the blend are categorized as supplemental: since, blended learning cannot totally replace face-to-face contact with students, who require ongoing support from lecturers. Students who participated in this study articulated this opinion strongly. Accordingly, the ingredients may include resourcing the online environment with supplemental materials, online discussion, and online quizzes, responding to students question at any time, flexibility of online activities for computer lab or home.
Conclusions and Implication

Blended learning cannot totally replace face-to-face contact with students. Participants of this study strongly articulated the presence of face-to-face contact. The successful examples of blended learning ensure a good mix of delivery methods that are able to suit individual nature of the learners. Successful development of blended learning requires institutional support and willingness. Hence, Universities must be prepared to invest time and resources in developing and sustaining blended learning environment.

A substantial time commitment is needed at the startup phase to analyze the content and choose and/or develop online platform. Although technology is important, the most important element for successful development of blended learning is an understanding of the learners’ preferred learning methods and the types of support they require, as evidenced in the interviewees’ comments in the present study. A step by step use of enabler, enhancement and transformational blending model is suggested to testify the benefits of the blended learning which helps students to be familiar with the technology and easily manipulate the required elements through time.

Based on the findings of this study, notable recommendations can be made on the development of blended learning. It should be noted that different courses require different forms of blended learning to go with the nature of the course and students’ needs. As a result, having a flexible approach is important. It is important to understand students’ skills in computer usage in order to design a blended learning course that matches students’ preferences and expectations. Revisiting the existing teacher education curricula in such a way that teachers are endowed with TPCK (Technology, pedagogy and content knowledge) is a major aspect for the success of blended learning. The major limitation of this study is that the research findings are based on the views of students in a single institution and department. A suggested future research area is to conduct research in several universities to obtain a broader picture of students need and expectation of blended learning. Additionally, conducting an extensive study on the use of blended learning in particular subject disciplines is important. It was also recommended to apply the supplemental blended learning model with step by step execution of enabler, enhancement and transformational nature in future research.
References


Abstract

The major purpose of this study was to assess the current practice of provision of counseling services rendering in preparatory schools of Wollega Zones. It was designed to assess students and staff members’ awareness and attitude towards counselors and counseling services, counselor’s practical activities and delivery systems of counseling services and assessed the major challenges hinder counselors in giving counseling services. The targets of the study were East Wollega and West Wollega zones which were randomly selected from four Wollega Zones. The study involved counselors, school Directors, teachers and students. Accordingly, 10 Counselors and 10 Directors were selected by availability sampling method. From 167 Teachers, 50 of them were selected by simple random sampling method. From 5033 students, 350 of them were selected randomly after stratifying within their grade levels and sections. Both close-ended and open-ended questionnaires were administered and distributed for Counselors, Teachers and Students. Semi-structured interview was designed for school directors. Both quantitative and qualitative methods were employed to analyze and interpret the obtained data. These were descriptive and inferential statistical values such as percentages, mean, standard deviation, T-Test, one way ANOVA and Post-hoc test. Interview response summary was analyzed qualitatively. The result of the study revealed that, school members have low awareness towards counseling services, positive attitude towards counselors and counseling services. Counselors reported as they render both guidance and counseling services where predominantly guidance service is given. The outcome of T-test and one way ANOVA dictated as there was statistically significant difference between male and female students use counseling services in terms of sex and age respectively. Post-hoc test showed as the three age groups (16–20, 21-25 and above 25 years) being compared all are significantly different from each other. Counselors reported as they face many challenges to render effective counseling services.

Keywords: Guidance and counseling, Practices, Challenges, Attitude
Introduction

Education is the base for a nation's development. Education is said to be a medium of change, in knowledge and character. Adesemowo (as cited in Yilfashewa 2011) perceived education as an essential process in human development. Education has a lot to offer for the benefit of mankind.

According to Ferguson (2003) corroborated this assertion that education undoubtedly continues to remain the most outstanding development priority area in Africa. Also indicate that the core purpose of education in human development is such that an educated person can acquire the relevant knowledge, skills, attitudes, values and interest as would enable him or her become the subject of development.

The world in the 21st century continues to undergo considerable changes industrially, occupationally, socially, and economically. These changes are creating substantial challenges for children and young people. A rapidly changing work world and labor force; violence in homes, schools, and communities; divorce; teenage suicide; substance abuse; and sexual experimentation are just a few examples of these challenges. These challenges are real and they are having extensive impact on the personal/social, career, and academic development of the children and young people (Gysbers, 1999).

So, School is the institutional place where people acquire knowledge through teaching and learning processes and nearly all human beings can anticipate healthy growth in terms of developmental /growth, educational, and vocational experiences (Adebowale, 2015). One of the missions of schools is stimulating and shaping the new generation for the great experiences of life. Failures in proper adjustment to all the facets mentioned could affect the education of young people and expose them to environmental as well as personal problems that impede healthy development. To achieve these healthy lifelong developmental processes and experiences, the role of different stakeholders cannot be undermined in schools. One of these stakeholders in educational setting is school guidance and counseling services that aid the accomplishment of school missions and visions of preparing and producing competent, healthy and productive young generation for a nation. As Heyden (2011) described, the aims of school guidance and counseling service in schools are similar to the purposes of education in general which is targeted to assist students in fulfilling their understanding about oneself and acceptance of others, developing associations with peers, balancing between
permissiveness and controls in the educational setting, realizing successful achievement, and providing opportunities to gain independence among others. School guidance and services prepare students to assume increasing responsibility for their decisions and grow in their ability to understand and accept the results of their choices Gibson (2006) and Kauchak, (2011). The ability to make such intelligent choices is not innate but, must be developed. When guidance and counseling services are missing in schools, students’ adaptation becomes difficult thus leading to low performance, misbehavior and dropout.

As Rashid et al. (http://mpra.ub.uni-muenchen.de/53854/) explained, the role and responsibility of the counselor in educational institutions is much complex as compared to other organizations since there are legal, professional and organizational issues involved in counseling with school children. To achieve the above mentioned optimal benefits, it is not deniable that schools need well trained school counselors and proper utilization of the services. However, this educational integral part of the service is not being implemented similarly in the world. It is effectively being used and implemented in the educational system of developed nations.

When we look at the experience of Ethiopia, though the concept is new (Yusuf, 1998), it is getting better attention for the last ten years than before. With the increasing number of higher educational institutions in the country, the field of psychology started to be opened in different universities than before. Besides, opening of postgraduate program in counseling psychology at different universities than before is another improvement thought it is too late. Now a days, the emerging issues of personality maladjustment, poor study habit, career choice problem and lack of knowledge of one’s aptitudes add skills make it obligatory for our educational planners and administrators to build appropriate guidance and counseling program into our education system at different level for the development of the individual student into an adult personality, intellectual and functional proficiency, discipline and confidence. Consideration of these psychological make-ups will aid the 70/30 student ratio of natural science and social science placement policy of the government. However, the extent of proper utilization of school guidance and counseling services in aiding government policy and above all student achievement is not well researched so far. For instance, Blind (2013) indicated that Ethiopia is one of the countries where no evidence could be found to suggest that counseling is available or officially valued in state funded schools.
Additionally, Yusuf (1998) recommended that extensive research should be carried out on the field and service to evaluate its status. All these suggest that comprehensive study should be carried out in order to assess whether profession of guidance and counseling is serving the need of students at secondary school level or not.

**Demand of Counseling Service in Ethiopia**

In Ethiopia, the terms guidance and counseling were introduced in the educational literature in response to the changing needs of the society mainly as a result of the political, economic, and social impact of the revolution (Yusuf, 1998). Training of school counselors started in 1966-1967 with the offering of guidance and counseling course at Addis-Ababa University. It was not until 1974 that a full-fledged department of psychology was established there Yusuf, as (cited in Baker, 2002). Since 1960s graduates of Psychology were assigned as school counselor. However, as Yusuf (1998) indicated it is difficult to call these graduates as school counselor since they have taken only three counseling course. The need of school guidance and counseling professionals can be described in different ways. Among others, the need can be estimated by conducting census, assessing needs based on the available human resource in the school and total number of students, and supply of human need of the school (Shertzer and Stone, 1980). The first and the third criteria depend on number of graduates from the Universities and emphasis of the Education bureau for staffing. For this research, the second criterion is highly emphasized.

Fred, (2010) stated that most accrediting agencies in the United States require a counselor-student ratio of one full-time counselor for 250 to 300 students. This writer added that a caseload of this magnitude is satisfactory if counselors are to have adequate time to counsel students individually and in small groups, as well as consult with faculty, administrators, and parents. In Canada, it has been suggested that 15 to 20 per cent of school population determines the number of students who may be in need of individual counseling or direct intervention of some kind. Thus, in a school population of 500, the school counselor can estimate that about 75 to 100 students may need some direct service with some aspect of their growth and development. Time to deliver this type of intervention needs to be factored into the school counselor’s overall schedule (Prince, 2005). In some European countries, resource allocation is worked out in terms of guidance staff-to-student ratios. Typically, the staff-to-student ratio is quite high (e.g. in Cyprus, Romania and...
Shertzer and Stone stated that one full-time counselor for 600 pupils in elementary schools, one full-time counselor for 300 pupils in secondary schools, and one full-time counselor for 750 or 1000 students in junior colleges and above is recommended. On the other hand, the American National Association for College Admission Counseling (NACAC, 1999) believes that the implementation of a precollege guidance and counseling initiative must take into consideration factors such as concern for student growth and development needs, program scope, role of the counselor, and the number of support staff available. The association accepted ideal counselor/student ratio of 1/100, and it align with the position statement of the American School Counselor Association (ASCA, 2006) with its recommendation that the ratio be between 1/100 (ideal) and 1/300 (maximum).

**Utilization of School Guidance and Counseling Service in Ethiopia**

In developed countries, the profession of counseling is integrated in the education system and all concerned school bodies other than trained counselors cooperate with counselors for the effectiveness of the process. Accordingly, counselors at different educational levels have clear written and demarcated roles and responsibilities in their operation. The major goals of school guidance and counseling are to promote personal growth and to prepare students to become motivated workers and responsible citizens. Every individual may need direct or indirect aid in developing desirable attitudes and modes of behavior in his home and in his relationships with his associates outside the home. The kind and amount of direct or indirect help needed by learners vary somewhat with developmental stages and school level. Educators recognize that in addition to intellectual challenges, students encounter personal/social, educational, and career challenges. School guidance and counseling programs need to address these challenges and to promote educational success (Fred, 2010). But in Ethiopia, one of the problems associated with roles and responsibilities of school counselor is absence of professional job description for counselors. With this regard, the finding of Yirgalem (2013), and Yusuf (1998) have indicated that guidance and counselors in schools did not have clearly defined roles and responsibilities. Rather, they were preoccupied with routine works coming from the school administrators than helping
students to utilize their service to be effective in their academics and solve different psychosocial problems they encounter in daily life.

Guidance and counseling services are part of a broader delivery system designed to enhance the success of all learners. The school counseling profession has struggled throughout history to secure a legitimate and integral position in the school’s educational mission. For decades, school counselors have complained that they have no time for real counseling because they are expected to perform many functions unrelated to their professional training” (White, 1981). Tension exists between administrators and counselors because each holds different expectations for the counselor’s work. When administrators exclude school counselors from meaningful conversations with school leaders regarding school systems or their professional status within the organization, school counselors protest. Whiston and Sexton (1998) suggest that, counselors may be excluded from leadership role and assigned these non-school counseling duties (such as clerical responsibilities) because they fail to research or evaluate their programs, and thus are unable to prove that their current roles or services benefit students.

Counseling service assist students in their personal, academic and socio-economic problems which later on affects the quality of education. In order to benefit from the service, analyzing its practices and identifying some problems, which hinder it from progress and recommending certain ideas is the timely issue for the advancement of education of the Region to Zones. Thus, this study was designed to assess different challenges that guidance and counseling professionals in preparatory schools in Wollega Zones encounter in providing this vital service.

**Statement of the Problem**

Guidance and Counseling plays a significant role in the overall growth and development of a high school student and is therefore an essential part of school curriculum. This is because high school students are at the stage of adolescence which is characterized by many physical and psychological changes which pose a number of personal, social & educational challenges (Mutie and Ndambuki, 1999).

In Ethiopia absence of clearly stated policy document, job description for staffs assigned in secondary schools and any guidelines that describe about the service in secondary schools is a major challenge. Congruent with this idea, Blind (2013) indicated that Ethiopia is one of the countries where no evidence could be found to
suggestion that counseling is available or officially valued in state funded schools. Another studies further explained that school guidance and counseling professionals are not aware about their roles and responsibilities due to absence of professional job description and any guidelines. As a result, they are preoccupied with routine works coming from the school administrators (Yusuf, 1998 and Yirgalem, 2013). From these multifaceted problems, one can conclude that the service is not effectively serving students academic and psychosocial needs they encounter and needs due attention by the concerned bodies to make it effective. But what have to be bear in mind is it vary from region to region, zone to zone and school to school. However, what is interesting is that the service is being offered at different public Universities (Yilfashewa, 2011), and in different secondary schools of the country with full of its problems (Yiregalem, 2013; Terje and Cherinet, 2004; Baker, 2002; Sileshi, 2000; and Yusuf, 1998).

The problem stated above was observed during the researchers had been served as school counselors at different senior secondary schools, in the meantime of researchers supervise PGDT (Post Graduate Diploma in Teaching) trainees at secondary schools, from counselors complain usually in schools and in informal discussions concerning their challenges, community service and observation while the teachers explain their complain continuously in meetings and in informal discussions concerning their occupational worries stimulates the researcher to conduct this study. Additionally, there was poor awareness regarding counselors and counseling service among students and school members. By evaluating these gaps critically, the researchers inspired to conduct the current study.

Generally, the main objective of this study was to assess the current status of provision and practices of counseling services rendering in Preparatory schools of Wollega Zones.

Materials and Methods
The study was employed descriptive survey research design. This is appropriate for the study because it enable the researchers to gather data from a wide range of respondents on the contribution of counselors on students’ behavior in the selected Preparatory schools.

The subjects of the study for this research were five purposely selected preparatory schools of two Wollega Zones. These zones were; East Wollega and West Wollega.
zones. The reason of selecting Preparatory schools purposively was availability of counselor in schools and the researchers’ expectation of representative sample schools. Accordingly, from East Wollega zone; Gida Ayana, Sibu Sire, Diga, Ebantu and Arjo Awuraja Preparatory schools were purposively selected. Similarly, Ghimbi, Bila, Nedjo, Mana Sibu (Mendi) and Guliso Preparatory schools were purposively selected. The study involved counselors, school Directors, teachers and students from grades 11 and 12 in the selected preparatory schools.

The selection was based on availability sampling for counselors and Directors, simple random sampling technique for teachers and stratified random sampling technique for students. Accordingly, 10 Counselors and 10 Directors were selected by availability sampling method. From 167 Teachers, 50 of them were selected by simple random sampling method. From 5033 students, 350 of them were selected randomly after stratifying within their grade levels and sections. Questionnaires and interview methods were used to collect data from respondents. Both close-ended and open-ended questionnaires were administered and distributed for Counselors, Teachers & Students. Semi-structured interview was designed for School Directors.

The validity and reliability of the instrument was achieved through a pilot study. Accordingly, in order to test the validity and reliability of the instruments for the final research, pilot study was conducted on two similar Kelem Wollega preparatory schools namely, Kelem and Hero Sebu (Lalo Asabi) that were not included in the final research.

The questionnaire was administered to 50 students, 10 teachers and 2 Counselors. Questionnaire items were prepared differently for the three target populations. The responses of the participants to items of counseling practices were scored for each scale. The obtained Cronbach alpha was 0.643, 0.76 and 0.81 respectively. Subsequently, to improve the reliability of students’ questionnaire, four items which had low reliability were discarded. Cronbach alpha thus obtained was 0.716. The items were used for data collection for the main study after slight edition was used to improve clarity.

Different quantitative and qualitative methods were employed to analyze and interpret the obtained data. These were descriptive and inferential statistical values such as percentages, mean, standard deviation, t-Test, one way ANOVA and Post-hoc tests.
Frequencies and percentages were used for the proportion of responses on the perception of awareness, practical activities observed and challenges hinder counselors. The t-Test and one way ANOVA used to measure the difference between different categories of participants. Accordingly, Independent sample t-tests were computed to assess if there might be differences between male and female students towards guidance and counseling services.

According to Pallant, One way ANOVA is used when two or more groups of variables need to be compared. One-way analysis of variance helps to know whether groups differ, but it won’t tell where the significant difference is (gp1/gp3, gp2/gp3 etc.). Thus, Post-hoc test was used to assess the groups’ difference. Accordingly, student respondents were categorized in to three levels by their age and the difference was computed. Interview response summary fact was analyzed qualitatively.

Results
From the total questionnaires distributed to participants (Counselors, Teachers and Students), 402 (98%) were filled out and returned. The data obtained through interview with School Directors was analyzed qualitatively.

Table 1: Background of Respondents (Directors, Counselors and Teachers)

<table>
<thead>
<tr>
<th>No</th>
<th>Participants</th>
<th>M</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Directors</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Counselors</td>
<td>9</td>
<td>90</td>
</tr>
<tr>
<td>3</td>
<td>Teachers</td>
<td>36</td>
<td>72</td>
</tr>
</tbody>
</table>

Table 2: Background of Student Respondents

<table>
<thead>
<tr>
<th>No</th>
<th>Respondent</th>
<th>Male</th>
<th>%</th>
<th>Female</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age: 15-18</td>
<td>79</td>
<td>44.13</td>
<td>84</td>
<td>49.12</td>
</tr>
<tr>
<td></td>
<td>19-22</td>
<td>89</td>
<td>49.72</td>
<td>82</td>
<td>47.95</td>
</tr>
<tr>
<td></td>
<td>23 and above</td>
<td>11</td>
<td>6.14</td>
<td>5</td>
<td>2.92</td>
</tr>
<tr>
<td>2</td>
<td>Grade: 11</td>
<td>94</td>
<td>50.27</td>
<td>93</td>
<td>49.73</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>85</td>
<td>52.14</td>
<td>78</td>
<td>47.85</td>
</tr>
<tr>
<td>3</td>
<td>Sex Male</td>
<td>179</td>
<td>51.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>171</td>
<td>48.86</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Analysis of Counselors Responses
Under this topic, response of counselors which was gathered by questionnaire was analyzed by being categorized into three main thematic areas. These thematic areas were; counselors’ perception towards counseling, delivery systems counselors practically uses and challenges face counselors’ to give counseling services.

Counselors’ Perception towards Counseling
Counselors were assessed regarding their perception towards counseling service and replied as more than half (60%) of them were not happy and interested to their profession where as 40% of Counselors shows positivity towards Counseling profession. Counselors replied as school community has low awareness towards counseling and counselors’ role, thus, few teachers refer students to counselors. When counselors assessed regarding their comfort to their daily activities, 6(60%) of them showed refusal and 4(40%) replied as they were not feeling discomfort.

Regarding students confidence to contact counselors in need of help, 70% of counselors replied as students afraid to go to counselors and the left 30% seems showed as students do not fear to contact counselors. Regarding professional competence of counselors, 6(60%) of them replied as they had no more problems and 40% of them showed as training they have got at different pre-service education has no direct link with what they countenance in actual school settings. Almost all counselors perceived as school community do not support them to provide effective counseling. Similarly, all counselors agree as they leave counseling in preparatory schools if they got other opportunity. This implies directly as counselors were not satisfied to their service in the selected preparatory schools.

Counselors’ Practical Activities of Counseling Delivery Systems
Regarding how much students use counseling, few students (30%) use usually, 50% use counseling and 20% do not use. Similarly, counselors responded as many students (60%) use guidance than individual counseling based on students’ cases. Majority of counselors replied as they face material scarcity (80%) to provide effective counseling and 20% didn’t agree with material scarcity. It is also clear from the table that only 30% of the counselors consider guidance and counseling essential in boosting students’ self-understanding. The reason seems that, the number students’ usually use counseling was few. Counselors plan to prepare different programs to aware counseling for school members, but the school...
administrators do not show more interest. Thus, only 30% got opportunity, 50% used sometimes and 20% did not totally prepared such special programs. Moreover, counselors replied as School administrators usually prefer counselors to order for routine activities and 9(90%) of respondents agreed.

Counselors’ Challenges to Provide Counseling Services
Almost all counselors replied as they were challenged by school administrators to spent most of their time doing non-professional activities. Regarding item said ‘Low emphasis community gives for counselors’ almost 40% of counselors have supported whereas 60% of them didn’t supported. This implies that, school community gives average value for counselors besides awareness gap seen. All counselors altogether raised the problem of reference centers for clients need further reference centers. Similarly, counselors raised less benefit they get when compared with teachers. For instance, night classes, overload, etc.

Teachers’ Responses towards Practical Application of Counseling Services
Teacher respondents were asked to respond whether ‘Teachers refer students to counselors’ and clearly explained as more than half 31(62%) of teachers have no interest to refer students with different problems to counselors, 16(32%) agree and 3(6%) refused to decide. Majority (98%) of respondents unquestionably agreed as counselors can solve different problems of students. Majority of Teacher respondents approved challenges face counselors being ordered to do routine activities. Counselors are effective by applying different counseling techniques as almost all teacher respondents, but the problem was that, small number of clients contact counselors. Finally, 54% of respondents replied as counselors do not use different punishments and 48% responded as counselors sometimes use punishments especially when students showed misbehaved in school settings.
Analysis of Students’ Responses

Table 3: Analysis of Students’ Responses towards Counseling Services (N=342).

<table>
<thead>
<tr>
<th>No</th>
<th>Items</th>
<th>Agree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>F</th>
<th>%</th>
<th>F</th>
<th>%</th>
<th>F</th>
<th>%</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>School counselors help students practically</td>
<td>250</td>
<td>73.1</td>
<td>69</td>
<td>20.1</td>
<td>23</td>
<td>6.7</td>
<td></td>
<td></td>
<td></td>
<td>2.41</td>
</tr>
<tr>
<td>2</td>
<td>Students’ positive attitude and respecting towards counselors</td>
<td>282</td>
<td>82.4</td>
<td>47</td>
<td>13.7</td>
<td>13</td>
<td>3.8</td>
<td></td>
<td></td>
<td></td>
<td>2.42</td>
</tr>
<tr>
<td>3</td>
<td>Counselors spend most of their time on administrative and routine activities</td>
<td>333</td>
<td>97.3</td>
<td>9</td>
<td>2.6</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td>2.48</td>
</tr>
<tr>
<td>4</td>
<td>Students with different problems referred structurally to counselors</td>
<td>187</td>
<td>54.6</td>
<td>13</td>
<td>39.1</td>
<td>21</td>
<td>6.1</td>
<td></td>
<td></td>
<td></td>
<td>2.32</td>
</tr>
<tr>
<td>5</td>
<td>It is Counselors who find students with different problems to help since students afraid to find counselors</td>
<td>201</td>
<td>58.7</td>
<td>87</td>
<td>25.4</td>
<td>54</td>
<td>15.7</td>
<td></td>
<td></td>
<td></td>
<td>2.34</td>
</tr>
<tr>
<td>6</td>
<td>Counselors importance than traditional elders</td>
<td>321</td>
<td>93.8</td>
<td>-</td>
<td>-</td>
<td>21</td>
<td>6.1</td>
<td></td>
<td></td>
<td></td>
<td>2.46</td>
</tr>
<tr>
<td>7</td>
<td>Counselors motivate students than teachers to use their academic potentials</td>
<td>187</td>
<td>54.6</td>
<td>134</td>
<td>39.1</td>
<td>21</td>
<td>6.1</td>
<td></td>
<td></td>
<td></td>
<td>2.18</td>
</tr>
<tr>
<td>8</td>
<td>Counselors use corporal punishments on misbehaved students</td>
<td>142</td>
<td>41.5</td>
<td>180</td>
<td>52.6</td>
<td>20</td>
<td>5.8</td>
<td></td>
<td></td>
<td></td>
<td>1.83</td>
</tr>
<tr>
<td>9</td>
<td>Counselors low satisfaction to their profession</td>
<td>253</td>
<td>73.9</td>
<td>77</td>
<td>22.5</td>
<td>12</td>
<td>3.5</td>
<td></td>
<td></td>
<td></td>
<td>2.32</td>
</tr>
<tr>
<td>10</td>
<td>I think students have no more awareness about counselors and counseling services</td>
<td>197</td>
<td>57.6</td>
<td>129</td>
<td>37.7</td>
<td>16</td>
<td>4.6</td>
<td></td>
<td></td>
<td></td>
<td>2.08</td>
</tr>
</tbody>
</table>

T-Test Analysis of Students’ Responses towards Counseling Services

Table 4: T-Test Analysis of Students’ Responses towards Counseling Services

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.003</td>
<td>.959</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-2.083</td>
<td>.311.2</td>
</tr>
</tbody>
</table>
The outcome of t-test dictated as there was statistically significant difference between males and females, i.e. the significance level of Levene’s test was F (2,340)=0.04, \( P<0.05 \). This means that the variances for the two groups (males/females) are not the same. It therefore seemed that, there was difference between males and female students in terms of awareness towards counseling services, challenges face students towards counseling services and using counseling services. This result implied similarly with open-ended result as females have more likely chances to be affected by culture of fear and shyness to get awareness and get access to use guidance and counseling services.

**ANOVA (One way) Analysis of Variances of Students’ Responses towards Counseling Services**

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>442.320</td>
<td>2</td>
<td>221.160</td>
<td>14.305</td>
</tr>
<tr>
<td>Within Groups</td>
<td>5241.098</td>
<td>339</td>
<td>15.460</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5683.418</td>
<td>341</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Student respondents were assessed regarding their awareness towards counseling services, practical use of counseling services and challenges face students to use counseling services. As indicated in above table, the analysis of variance dictated statistically significant difference in terms of age level of students categorized into three groups (15-18, 19-22 and 23 years and above), i.e., the overall Sig. value is .01, which is less than .05, indicating a statistically significant result somewhere among the three groups. This difference was expected due to the access of information and knowledge gap between students with different age categories.

**Post-hoc Comparison**

Table 6: Post-hoc Test Results

<table>
<thead>
<tr>
<th>(I) Age of Respondents</th>
<th>(J) Age of Respondents</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>16-20 years</td>
<td>16-20 years</td>
<td>-1.144*</td>
<td>.486</td>
<td>.050</td>
<td>-2.29</td>
</tr>
<tr>
<td></td>
<td>above 25</td>
<td>2.850*</td>
<td>.686</td>
<td>.000</td>
<td>1.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-25</td>
<td>16-20 years</td>
<td>1.144*</td>
<td>.486</td>
<td>.050</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>above 25</td>
<td>3.994*</td>
<td>.747</td>
<td>.000</td>
<td>2.24</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-20 years</td>
<td>above 25</td>
<td>-2.850*</td>
<td>.686</td>
<td>.000</td>
<td>-4.47</td>
</tr>
<tr>
<td>21-25</td>
<td></td>
<td>3.994*</td>
<td>.747</td>
<td>.000</td>
<td>-5.75</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the 0.05 level.
Having received a statistically significant difference i.e., since the Sig. value was less than .05, (.01), it is recommended to look at the results of the post-hoc tests to dictate exactly where the differences among the groups occur. Accordingly, from above table, by looking down the column labeled Mean Difference, asterisks (*) next to the values listed showed that the three groups being compared are significantly different each other. That is, the 16–20, 21-25 and the 25+ age group differ significantly in terms of their awareness towards counselors and counseling service scores.

**Analysis of Students’ Open-ended Responses towards Counseling Services**

Student respondents explained as school members have low awareness towards counseling services and there was information and knowledge gap between school members. Despite of the existence of knowledge gap, almost all respondents agreed as staff members have information and some awareness. But, the level of awareness of many staff members might not be considered as optimums that make them to use. This idea was supported by Beker (2002).

Respondents explained as they have positive attitude towards counselors and counseling services though they have no more awareness. Counselors contact students with different behavioral problems mostly than other staff members. They use different counseling techniques for different students based on student’s problems. Accordingly, Counselors rarely observe serious problems in school settings. Thus, it is very rare time at which counselors face clients with serious problems to apply advanced therapeutic techniques in schools. Since the types of problems Counselors observe in school settings are not serious most of the time, counselors treat students as soon as they get such students by taking and appointing to their offices. Moreover, counselors give group guidance than individual counseling in school environments. Generally, though there was no structural referring mechanism by which individuals with different problems can commune counselors, counselors contact individuals in need of guidance/counseling by getting information from different staff members and the others. After that, counselors apply counseling techniques to treat clients or individuals need help based on their problems.

The major challenges that counselors face in preparatory schools were; school community low awareness towards counseling, absence of guidelines, scarcity of
materials, standardized offices for counseling services, reference books, reference centers for clients for further treatments, etc.

**Interview Results of Preparatory School Directors**

Semi-structured interview was made with Preparatory School Directors regarding counseling services rendering in Wollega preparatory schools. Accordingly, nine items of interview results were analyzed as follows:

Data obtained through semi-structured interview made with Directors show that:

*School members have low awareness towards counseling services. Even though there is a huge gap regarding awareness towards counseling services among school community, teachers and staff members themselves have low awareness and act below they are expected to act.*

With regards to school members’ attitude towards counselors and counseling services;

*They replied as school members have positive attitude towards counselors and counseling services and Counselors are treated equally with other staff members by all school members despite low awareness towards significance of counseling services.*

Regarding item stated as 'How do you understand practical application of counseling services rendered by counselors?’ “They replied as counselors render counseling services for individuals need counseling.” The problem here is that, low accessibility of the service due to improper referring of clients to counselors, low level of understanding regarding significance of counseling services and afraid/beeing closed to openly discuss problems that limit counselors to be effective. On the other hand, large number of students cannot understand counselor’s role. They consider similarly with other teachers and staff members. Since counselors have good relationship with school members, it is counselors’ role to create awareness for school members.

With regard to counselor’s loyalty to their profession, almost all respondents responded positively, i.e. many counselors were steadfast to their profession despite to be challenged sometimes due to environmental problems. Additionally, counselors are cooperative and interested to help and support students and staff.
members in spite of absence of formal reference structure of counseling and proper feedback given for counselors.

Regarding the major challenges that hinder counselors in preparatory schools were explained similarly as it was replied by students and summarized as follows:

*School community low awareness towards counseling services, absence of guidelines by which counselors can render counseling services and report their works to different school Administrators.*

More specifically, all interviewee passionately expressed their feelings as;

*Scarcity of materials, standardized offices for counseling services, reference books, reference centers for clients for further treatments, and low emphasis given for counseling by school members due to low awareness of newness and significance of counseling were the main challenges.*

**Discussion**

The findings of this study revealed that, school members have low awareness but have positive attitude towards counseling services, counselors render both guidance and counseling services where predominantly guidance service is given and counselors face challenges in terms of scarcity of materials, absence of counseling guidelines, absence of training for counselors, low emphasis given for counseling, and etc.

**School Members Perception towards Counselors and Counseling Services**

In line with an attempt to generate possible answers for basic research questions, awareness of school members towards counseling services was assessed and the result revealed as school members have low awareness towards counseling services. This result conformed to Beker, (2002) that revealed as all the groups of respondents in all used instruments proved that there was awareness about the role and relevance of the service in the schools of the Region. Similarly, student respondents reported that they knew the presence of counseling service in their school.

The result of this study dictated as school members have positive attitude towards counselors and counseling services. More students, 282(82.45%) have positive attitude for counselors and respect counselors. This finding concurs with Beker that
revealed as students have positive attitude for counselors and opposed by Callen & et al. (2012) that students have somewhat negative attitude towards guidance and counseling services. These findings concur with Kombo's (1998) that explained as high school students have a somewhat negative attitude towards guidance and counseling.

Delivery Systems and Challenges Face Counselors to Render Counseling Services
Counselors replied as they render both guidance and counseling services where predominantly guidance service is given. Counselors render counseling services for individuals based on client’s problems mainly by using their Guidance and counseling offices.

While they render guidance and counseling services, the major challenges that hinder counselors were; school community low awareness towards counseling services, absence of guidelines by which counselors could be guided with and assessed to be given feedback by school Administrators, scarcity of materials, standardized offices for counseling services, reference books, reference centers for clients for further treatments, etc. and low emphasis given for significance of counseling by school members and Government at large. Similar with this study result, the findings of Callen and et al. (2012), indicated that the available guidance and counseling facilities are inadequate. It specified that although 61.9% of the guidance and counseling personnel had an office, 38.1% which is a high percentage did not. Besides, contrary to Kiragu’s (2002) as cited in Callen & et al. (2012) recommendation, most school counselors’ offices do not have the basic guidance and counseling facilities such as reference books, guidance and counseling manual and career resource materials.

Successful implementation of guidance and counseling programs depends on support from the stakeholders. Quality guidance and counseling services require a number of facilities. These include: office space, bookshelves, drawers, files, finance, time, reference books, guidance and counseling manuals, psychological test materials etc. This is a great challenge which conforms to Achieng’s (2003) views that without a private accommodation delivery of counseling services will not be effective. As far as problems related with provision of school counseling is concerned, data were collected from school administrators and counselors.
From school administrators (directors and Vice Principals) side, all respondents state that there is lack of commitment and creativity by professionals to promote the profession in their respective schools. They further described that there are so many problems in schools but counselors are reluctant and disinterested to carry out their duties properly. Additionally, lack of cooperation among counselors, and lack planning skills are some challenges mentioned by school administrator that was impeding effective utilization of the service. This finding is similar with what presented by Abdela, (cited in Beker, 2002) stating that school counselors lack of motivation, absence of supervision and lack of evaluation skill about the service, poor personal creativity of counselors to adjust themselves in the existing situation, and considering their profession as low income generating service among others.

Concerning any policy document or guideline to monitor and assess contribution of the service in addressing the needs of their students, all school directors have responded that they do not have any reference and job description to evaluate the effectiveness of their counselor unlike other teachers. Similarly, all school counselors stated that there is no job description and guideline that guides them. They further described that they are not evaluated based on their provision of guidance and counseling services. But rather, they are evaluated by their engagement in other activities than counseling services provided which is hindering them not to get appropriate feedback and improve their services. This trend contradict with what Chireshe (2006) stated that some African countries (Uganda, Malawi, Zambia, South Africa, Botswana and Nigeria) have School guidance and counseling services policies. This implies that less emphasis is given for school guidance and counseling services for its effective utilization and needs the attention of concerned officials in Ethiopia. Concerning initial training and on job training opportunity to upgrade their profession to effectively render the service, only one school counselor responded that (s) he has got on job training on school guidance and counseling after graduation. But the rest replied that they didn’t get any training that prepares them for the position and handle different student cases.

Besides, with the exception of one counselor, the rest responded that the contribution of initial training is not a great deal to prepare them for current practice as a school counselor. This align with what Semira as (cited in Baker, 2002) and Sileshi, (2000), described that secondary school counselors are not effective in their activities due to inadequate training, which is given for general psychologists not professional counselors and what Yusuf (6) stated that Ethiopian school counselors
have no access of refreshing on job trainings and the curriculum will not prepare them very well to be good school counselor. The other challenge that all counselors of the study described was that number of students in their respective schools and the available counselor (student counselor ratio) does not match. The numbers of students are too much and beyond their capacity to address the existing needs of students. Besides, lack of conducive office, lack of budget allocation, lack of coordination among stakeholders, lack of awareness among school community about the service, defensiveness of clients during the session, and lack of proper supervision by seniors are among the challenges they mentioned for the low effectiveness and inefficient status of the service in secondary schools.

T-test and one way analysis of variances was computed to assess if there was any statistically significant difference among students to use counseling services in terms of age and sex. Similar to T-test result, ANOVA (One way) result indicated statistically significant difference in terms of age level of students categorized into three groups (16–20 years, 21-25 and 25 and above). Post-hoc tests revealed as the three groups being compared all are significantly different from each other. That is, the 16–20, 21-25 and the 25+ age group differ significantly in terms of their awareness towards counselors and counseling service scores.

Conclusions and Recommendations

Conclusions

The result dictated as school members (Teachers, staff members and students) have low awareness towards counseling services. School members have positive attitude towards counselors and counseling services. Counselors reported as they render both guidance and counseling services where predominantly guidance service is given. Counselors render counseling services for individuals based on client’s problems mainly by using their Guidance and counseling offices. The outcome of Independent sample T-test dictated as there was statistically significant difference between males and females, i.e. the significance level of Levene’s test was $F(2,340)=0.04$, $p<0.05$.

Similar to T-test result, ANOVA (One way) result indicated statistically significant difference in terms of age level of students categorized into three groups, i.e., the overall Sig. value is .01, which is less than .05, indicating a statistically significant result somewhere among the three groups. Accordingly, by using Post-hoc tests,
The three groups being compared all are significantly different from each other in terms of their awareness towards counselors and counseling services.

The major challenges that hinder counselors to render effective guidance and counseling services were; School community low awareness towards counseling services, Absence of guidelines by which counselors could be guided with and assessed to be given feedback by school Administrators, Scarcity of materials, standardized offices for counseling services, reference books, reference centers for clients for further treatments, low emphasis given for significance of counseling by school members and Government and etc. Insufficient training of counselors on guidance and counseling services; and overburdening of counselors with different routine based heavy work load have sufficiently influenced the quality of guidance and counseling services in preparatory schools of Wollega Zones.

**Recommendations**

In order to make guidance and counseling to play the role for which it was intended in preparatory schools, it requires concerted efforts from all the stakeholders in the education process. In the light of this, the researchers offer the following recommendations:

Counselors should collaborate with school administrators, Woreda Education Office and Non-Governmental Institutions endeavor to mobilize by preparing different programs, seminars and workshops to aware all school community so as to make them users of such very vital service. Counselors should understand existence of awareness, motivation and knowledge gap among students in terms age level, sex and other backgrounds and develop different training programs to minimize these problems. Counselors should give special emphasis for female students to render counseling service since they culturally face more challenges than their male counterparts. Counselors should be active, creative and role model for others for every activities. All schools should have professional counselors and provide basic resources for guidance and counseling services effectiveness. These include; preparing counseling office equipped with reference materials, adequate career resource materials, providing reference centers for clients for further treatments and high emphasis should be given by all concerned bodies for counseling services. School Administrators in collaboration with Woreda Education Officers should provide different trainings, educational opportunities and other incentive advantages for Counselors so as to enhance their competencies. School
Administrators should properly attend counselors by clarifying their roles and responsibilities especially to escape counselors from routine activities that basically hinder counselors not to effectively render counseling services. This means, proper policy guideline and job description should be developed for school counselors. The researchers recommended further researchers to conduct similar and more researches in related Educational Institutions regarding practices of Guidance and Counseling services.

References


Implementation of Instructional Supervision in Primary Schools of Aksum Town

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Abstract

The purpose of this study was to assess the implementation of instructional supervision in primary schools of Aksum Town. Mixed research design was employed in this study. The size of population was 368. From these, 103 teachers, 20 school principals, 3 supervisors and 2 heads of educational officers were used as a sample for this study. Both closed ended and open ended questionnaire and semi-structured interview were used as data collection instruments. These instruments were developed by the researcher. Pilot study was conducted before the questionnaire and interview were administered to the respondents. The reliability coefficients of the instruments with Cronbach Alpha (α) = (0.82, 0.92, 0.85 and 0.88) for supervisors’ qualification, the role of supervisors, contribution of instructional supervision for instructional improvement and factors that hamper instructional supervision implementation respectively. 123 questionnaires were distributed and the data gathered were analyzed using both descriptive and inferential statistical analysis techniques, specifically, frequencies, percentages, One sample t-test and independent sample t-test were employed to compute the data. In addition, the data obtained through open ended questions and semi structured interview were analyzed qualitatively. A total of 123 papers were properly filled out and analyzed. The result of One sample t-test about the professional qualification of supervisors revealed that the grand mean scores of teachers (3.48) and principals (3.49) were significantly higher than the expected mean value (3) at (t = 30.61, df = 102, p < 0.05) and (t = 13.88, df = 19, p < 0.05) respectively. In contrary to these, the result of a one sample t-test about the role of supervisors to support teachers’ professional development indicated that the grand mean scores of teachers (2.23) and principals (2.26) were lower than the expected mean value (3) at (t = -29.04, df = 102, p < 0.05) and (t = -11.21, df = 19, p < 0.05) respectively. This result showed that supervisors did not play their role to support teachers to advance their profession. In addition to this, the quantitative result confirmed that shortage of financial resource, absence of training, lack of time and pedagogical knowledge and skill on the part of supervisors were the major factors contributed for the failure of instructional supervision implementation. Thus, significant mean differences were not observed between teachers’ and principals’ response about supervisor’ qualification at (t = 0.33, df = 121, p
> 0.05), role of supervisors to support teachers’ professional development (t = 0.05, df = 121, p > 0.05), the contribution of instructional supervision to improve teachers’ instructional process (t = -0.03, df = 121, p > 0.05) and factors that hinder the implementation of instructional supervision (t = 0.07, df = 121, p > 0.05). Moreover, qualitative results showed similarity with that of quantitative results. Though supervisors are professionally qualified, they did not play their role as they were expected due to shortage of financial resource, absence of training, lack of time and pedagogical knowledge and skill on the part of supervisors. Therefore, in order to implement instructional supervision effectively, it was recommended that allocating adequate resources, commitment to provide professional development and arranging experience sharing program, reducing workload, creating awareness about the objective of instructional supervision, developing pedagogical knowledge and skill of supervisors, observing classroom instruction regularly through devoting much time at the expense of administrative tasks to identify learning difficulties and designing incentive strategy to motivate teachers are required.

**Keywords**: Instructional Supervision, Principals, School based supervision, Supervisor and primary school.

### Introduction

Supervision is one of the functions of education that offers opportunities for schools to improve the teaching learning process and the professional development of teachers (Arong and Ogbadu, 2010). The way teachers gain professional support from instructional supervisors and the way teachers view instructional supervision that they are undergoing is very important in the outcomes of supervision process. Related to this, Beach and Reinhartz (1989) explained that instructional supervision in school is the comprehensive ongoing processes that facilitate teachers’ professional growth and development throughout their careers. Quality teacher supervision enhances the performance and instructional effectiveness of teachers, thereby increasing the probability of desired student learning opportunities and results. Thus, the role of the teacher in promoting such process of improvement cannot be underestimated (Kutsyuruba, 2003).

The Education and Training Policy has stipulated to ensure the quality, equity as well the relevance of Ethiopian education which requires effective management and leadership at all levels of the education system (MoE, 2012). Extending this stipulation of the policy to the school level, the General Education Quality Improvement Package (GEQIP) has included school teachers’, principals' and
supervisors’ capacity building strategy with clear objectives to facilitate and support schools improvement program. Quality education depends on several issues. Among these, educational planning, management, teacher’s professional competence, and efforts of students, instructional supervision and classroom teaching-learning situation are the major ones (MoE, 2002). As a component of quality improvement package, Ethiopian teacher development program general guideline is stressing the need for school leadership and supervision that can effectively support schools in various aspects. To support this, Chanyalew (2005) stated that instructional supervision is important in promoting teachers’ professional development as they are frequently designed to identify and exemplify various effective classroom techniques and teacher skill to promote better teaching and learning process.

The quality of education is determined by the provision of adequate supervision. The goal of instructional supervision is to assist teachers in improving instruction (Glickman et al., 2001; Zepeda, 2003). In line with this, the process of supervising a teacher in an instructional setting often involves direct assistance to improve the strategies of classroom practice through observation and evaluation of teacher performance (Glickman et al., 2001). Hence, the techniques, methods, models, or processes used by supervisors at schools, provide the catalyst for any supervisory success.

Many researchers believe that instructional supervision has the potential to improve classroom practices, and contributes to student success through professional growth and improvement of teachers (Blasé and Blasé, 1999; Sergiovanni and Starratt, 2002). Supervision is viewed as a co-operative venture in which supervisors and teachers engage in dialogue for the purpose of improving instruction which logically should contribute to student improved learning and success (Sergiovanni and Starratt, 2002). To achieve the objectives of supervision, supervisors of instruction generally advise, assist and support teachers (Hoy and Forsyth, 1986; and Sergiovanni and Starratt, 2002) and inspect, control and evaluate teachers.

School supervision in general has existed in all countries for many decades and occupies a pivotal position in the management of education, which can be understood as an expert technical service most importantly concerned with scientific study and improvement of the conditions that surrounds learning and pupil growth.
(Alemayehu, 2008). However, the organization and function of supervision and even its terminology is different in different countries. Though scholars define the term instructional supervision differently, in this study, it is defined as the constant and continuous activity carried out in schools, which aimed at providing teachers with guidance, support, and assessment services so as to improve their pedagogical knowledge and skills in the teaching-learning process.

Nowadays, improving the quality of education has given priority in Ethiopia. To monitor the quality, the national authorities highly depend on the school supervision (De Grauwe, 2001). The realization of professional competence of teachers and the quality of education remains questionable unless due emphasis is given by higher authorities to implement instructional supervision program effectively. Concerning this, all teachers are not qualified enough, as a result they need support from supervisors (Giordano, 2008). Hence, to improve teachers’ instructional performance; the instructional supervisors should work with teachers in fixable and collaborative style. Thus, this study examined the implementation of instructional supervision in primary schools of Aksum Town.

**Statement of the Problem**

School supervision, is a long lived practice that has been playing vital roles in the management of educational activities. It is mainly concerned with improving schools by helping teachers to reflect their practices, to learn more about what they do and why, and to develop professionally (Sergiovanni and Starratt, 2007). Currently, supervision can be seen as a tool for fostering improvement in instruction, enhancing learning outcomes for all students, and promoting professional development for educators. In line with this, MoE, (2003) stated that the main focus of instructional supervision is providing support for teachers and enhancing their role as key professional decision makers in practice of teaching. In order to achieve the goal of education, schools need to have well-trained and professionally developed teachers.

According to MoE (2004), Ethiopian government has now shifted its attention to improve the quality of education through establishing quality education initiative. In this movement, it seems essential to assess the practice of instructional supervision so as to assure the provision of quality education. The achievement of educational goals requires the provision of continuous instructional supervision practices. The purpose of instructional supervision is to improve the teachers’ performance;
provide them with the needed assistance; for the total school improvement and providing quality education for the learners. Besides, instructional supervision can bring improvement in the staff development and school improvement programs. This helps teachers be professionally competent and active in the teaching learning process.

However, some of the research findings indicated that the practice of instructional supervision in schools were not effective in achieving their objectives. To support this, MoE (2002) and Getachew (2001) stated that opportunities that help to improve their teaching and learning process were inadequate, training programs were not relevant to real professional development of teachers, there was no systematic follow up about the effectiveness of supervisory practices, and support systems were not designed properly. In line with this, a research conducted by Gashaw(2008) in primary schools of Assosa Zone showed that the existing practice of instructional supervision was ineffective due to lack of adequate professional support to newly employed teachers, low level of classroom visits to enrich teachers instructionally and peer coaching by instructional supervisor, more focus of supervisors on administrative tasks at the expense of classroom instruction and less mutual professional trust between supervisors and teachers. This shows that the existing practice of instructional supervision was generally insufficient to help teachers in improving their skill of teaching.

In addition, some teachers, especially student-teachers were employed as a teacher without having sufficient pedagogical knowledge and skills. This might create a serious problem on the part of teachers to carry out appropriate teaching in the classroom; hence, there is a need for instruction in the classroom to be supervised. Thus, currently the practice of supervision has been criticized due its failure to improve the quality of teaching-learning process in schools due to lack of necessary supervision skills and techniques to assist teachers in a day-to-day operation.

Evidently, supervisors find themselves ill prepared and powerless to perform their perceived duties as the result of lack of training in supervision. Moreover, instructional supervisors spend much time to administrative tasks but little time is given to classroom activities, which need more attention. As a result, instructional supervision becomes ineffective in achieving its objectives.
As indicated in the research done by different scholars in the field, there was insufficient service of supervision provided for teachers to improve classroom instruction. Although some studies were conducted on the practices of instructional supervision in some areas, study has not been conducted in primary schools of Aksum Town. In addition, the researcher often observed that some of the primary school teachers in Aksum Town do not seem satisfied with supervision and professional support being rendered to them. Due to this, they might encounter difficulties to use different teaching methodologies, implement new curriculum and instructional training.

Hence, the researcher was inspired by the view that little attention was given to the issue of instructional supervision in primary schools. After a new educational program has been introduced, it is essential to undertake regular and systematic assessment on its effectiveness. Due to this, the research was initiated to assess the implementation of instructional supervision in primary schools of Aksum Town.

Therefore, the following research questions were formulated:

1. To what extent are instructional supervisors professionally qualified to give the required supervision service in primary schools of Aksum Town?
2. To what extent do teachers acquire professional support from supervisors in order to improve their instructional practices in primary schools of Aksum Town?
3. To what extent does instructional supervision contribute to improve instruction in primary schools of Aksum Town?
4. What are the major factors that hinder the implementation of instructional supervision in primary schools of Aksum Town?
5. Are there significant difference between teachers and principals on supervisors’ qualification, role, contribution of instructional supervision and factors hinder the implementation of instructional supervision in primary schools of Aksum Town?
6. What are the possible strategies used by supervisors to implement instructional supervision effectively in primary schools of Aksum Town?

**Objectives of the Study**

The general purpose of this study was to assess the implementation of instructional supervision in primary schools of Aksum Town. The specific objectives of this study were the following:
To assess the extent to which instructional supervisors are professionally qualified to give the required supervision service in primary schools of Aksum Town.

To examine to the extent teachers acquired professional support from supervisors in order to improve their instructional skills in primary schools of Aksum Town.

To evaluate the contribution of instructional supervision for the improvement of instruction in primary schools of Aksum Town.

To identify the major factors that hinder the implementation of instructional supervision in primary schools of Aksum Town.

To determine whether there are significance difference between teachers and principals on supervisors’ qualification, role, contribution of instructional supervision and factors hinder the implementation of instructional supervision in primary schools of Aksum Town.

Significance of the Study

This study is crucial to the improvement of instructional supervision practices in primary schools.

It is also hoped that, the study may have the following significance.

- It could be beneficial to principals and other school administrators interested in improving supervision as it relates to teacher development and growth at the primary school level.

- It also assists educational officers as well as supervisors for effectively supporting the operation of the education system and help to evaluate their supervisory functions that would enable them to take the necessary measures.

- It may provide information for regional, zonal and district educational expertise on the contribution of instructional supervision for the improvement of instruction and help them to do their share to improve supervisory practice in primary schools.

- It may also give relevant and timely information to school principals, teachers, supervisors and educational officers concerning the existing practice of instructional supervision.

- It may show the major contribution of instructional supervision for quality education and the professional development of teachers.
It may serve as a starting point for other researchers who are interested to conduct research in this area.

**Delimitation of the Study**

Although school supervision is a nationwide program, and important for all primary and secondary schools, this study has been delimited to Aksum Town primary schools which included teachers, principals and vice principals, supervisors and heads of educational office. Aksum Town was selected because teachers in primary schools of the town seem unsatisfied with instructional supervisory practices.

Since supervision is a broad concept, it is difficult to deal with all issues of supervision. Thus, this study was delimited to only important variables, which include; professional quality of supervisors, the role of supervisors to support teachers’ professional development and the contribution of instructional supervision to improve instruction. In addition, it tried to see whether there are significant difference between teachers and principals on supervisors’ qualification, role, and the contribution of instructional supervision to improve instruction and factors that may hinder the implementation of instructional supervision.

**Methodology**

**Research Design**

Since this study involved large number of participants to assess the application of instructional supervision in primary schools of Aksum Town, mixed research design was found to be suitable. As a result, the researcher used both quantitative and qualitative methods because mixed research design provided the researcher with additional opportunities to answer a more complete range of research questions. Moreover, this design enabled the researcher to capitalize the strengths, and minimize the weaknesses of quantitative and qualitative methods.

**Sources of Data**

For the purpose of this study, both primary and secondary data sources were used. The primary data sources were obtained through questionnaire and interview from primary school supervisors, principals and vice principals, teachers and heads of education offices while different documents pertained to the practices of instructional supervision were used as secondary sources of data.
Population, Sample and Sampling Techniques

In Aksum Town, there are 11 primary schools. Out of these, the researcher selected 8 schools using simple random sampling technique. This study included 8 primary schools as a population using comprehensive sampling technique. The target population was teachers, school principals, supervisors and heads of education officers. This research, therefore, covered a total of 343 teachers, 20 principals and vice principals, 3 supervisors and 2 heads and vice heads of education offices who constituted a total of 368 study population.

For manageability reason, the researcher selected 30% of the teachers from each school proportionally using simple random sampling technique because the number of teachers across the 8 schools was significantly varied. Therefore, the researcher took a total of 103 teachers from 8 schools. Then, each participant of the study was selected using simple random sampling technique. In lottery method, the researcher took the names of the teachers from each school and wrote their names on a piece of paper having equal size and then folded the papers and put them on a carton. Then, the researcher the drawing until the required number of samples was obtained.

With regard to the principals, supervisors and heads of education officers, the researcher took 20 principals and vice principals, 3 supervisors and 2 heads and vice heads of the education offices in the sample using comprehensive sampling technique. Therefore, in this study, 103 teachers, 20 principals and vice principals, 3 supervisors and 2 heads of education offices were used as a sample, making a total of 128 respondents.

Data Collection Instruments

For the purpose of gathering data, questionnaire, semi-structured interview and document analysis were employed. Questionnaire was used because it is more suitable to get a large amount of data from a large number of respondents with short period of time and with minimum cost. It also helped the respondents to choose one option from the given scales that best aligns with their views (Somekh and Lewin, 2005). Thus, it was administered for teachers and school principals.

Interview was designed to collect more supplementary opinion to validate and triangulate the data gathered through questionnaire. Semi structured interview was prepared for supervisors and heads of education officers. The reason behind semi-
structured interview items was the advantages of flexibility in which new questions can be forwarded during the interview based on the responses of the interviewee (James et al., 1997).

The researcher also used document analysis techniques using supervision plans, supervision guideline and practice, written reports on supervision and feedback obtained.

Finally, both questionnaire and interview were prepared in English language with the assumption that the respondents can understand the language.

**Data Gathering Procedures**

Before questionnaire and interview were administered to the respondents, the researcher went to Aksum Town education office and met heads of office and introduced himself to seek permission to access the lists of teachers, principals and supervisors in the schools. Using the given list, the researcher identified sample teachers, principals, supervisors and heads of education officers using simple random sampling technique proportionally. Following the identification, the researcher himself contacted each participant and clarified the purpose of the study. Then, the researcher collected the questionnaire in person. Finally, after the questionnaire was returned to the researcher, interview was conducted using face to face approach in school compounds by using about 15-20 minutes with each interviewee.

**Data Analysis Methods**

The researcher analyzed the data using both quantitative and qualitative statistical techniques since it was employed questionnaire, semi-structured interview and document analysis as data gathering tools. The researcher collected the questionnaire and identified properly filled questionnaire from incompletely filled ones. Next, the researcher coded the data, prepared code sheet, and filled data in a code sheet. Then, the data gathered through the questionnaire was analyzed with the aid of both descriptive and inferential statistical techniques.

Frequency and percentages were used to compute the characteristics of respondents related to sex, age, work experience and educational qualification. One sample t-test was used to examine the professional qualification, the role of supervisors and the contribution of instructional supervision to instructional
improvement. In addition, one sample t-test was used to identify the major factors that may hinder the implementation of instructional supervision.

Moreover, independent sample t-test was employed to determine whether there are significant differences between teachers and principals on supervisors’ qualification, roles, contribution of instructional supervision to improve classroom instruction and factors that may hinder the implementation of instructional supervision in primary schools of Aksum Town.

With regard to qualitative data, qualitative description, specifically, narrative analysis was used to analyze data which were obtained through interview and open-ended questions about the possible strategies used to improve the implementation of instructional supervision.

Finally, the researcher employed document analysis techniques using the performance of schools, supervision plans, supervision guideline and practice, written reports on supervision and feedback obtained to suggest the possible strategies to improve the practices of instructional supervision in primary schools of Aksum Town.

**Results and Discussion**

This study aimed at assessing the implementation of instructional supervision in primary schools of Aksum Town. To this end, data were collected from 123 teachers and principals using questionnaire with a 100% return rate. In addition, 3 supervisors and 2 heads of education officers were interviewed about the possible strategies used to improve the practice of instructional supervision. In this chapter, responses were organized according to the themes of the research questions. It began by describing supervisors’ qualification, roles, contribution of instructional supervision for the improvement of instruction, factors that hinder the implementation of instructional supervision and possible strategies used to improve the practices of instructional supervision respectively. Finally, this chapter presented the results and discussion of results simultaneously.

**The Qualification of Instructional Supervisors**

As indicated in Table 1, the quantitative results showed that both teachers and principals agreed that supervisors were professionally qualified and good level of knowledge about the practices of instructional supervision in the school. Thus, the result of a one sample t-test of teachers and principals about the professional
qualification of supervisors revealed that the grand mean scores of teachers (3.48) and principals (3.49) were significantly higher than the expected mean value (3) at (t =30.61, df = 102, p < 0.05) and (t =13.88, df = 19, p < 0.05) respectively. This result showed that supervisors have high level of understanding about the principle of instructional supervision although they failed to implement as they were expected. Contrary to the grand mean scores of respondents about supervisors’ professional qualification, both teachers and principals believed that supervisors were lacked pedagogical knowledge and skill as well as in service training has not been arranged for supervisors to advance their profession.

<table>
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<tr>
<th>Qualification of instructional supervisors</th>
<th>Respondents</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>df</th>
<th>Sig(2)</th>
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<tbody>
<tr>
<td>Supervisors are specialized in the field related to instructional supervision</td>
<td>Teachers</td>
<td>103</td>
<td>3.83</td>
<td>.37</td>
<td>22.72</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>3.80</td>
<td>.41</td>
<td>8.72</td>
<td>19</td>
<td>.00</td>
</tr>
<tr>
<td>Workshop, Seminars and trainings were arranged for supervisors related to instructional supervision</td>
<td>Teachers</td>
<td>103</td>
<td>3.49</td>
<td>.97</td>
<td>5.09</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>3.50</td>
<td>1.05</td>
<td>2.13</td>
<td>19</td>
<td>.05</td>
</tr>
<tr>
<td>In service training has been arranged for supervisors related to instructional supervision</td>
<td>Teachers</td>
<td>103</td>
<td>3.83</td>
<td>.69</td>
<td>12.10</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>3.80</td>
<td>.69</td>
<td>5.141</td>
<td>19</td>
<td>.00</td>
</tr>
<tr>
<td>In service training has been arranged for supervisors to advance their profession</td>
<td>Teachers</td>
<td>103</td>
<td>4.33</td>
<td>.47</td>
<td>28.57</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
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<td>4.30</td>
<td>.47</td>
<td>12.36</td>
<td>19</td>
<td>.00</td>
</tr>
<tr>
<td>Supervisors have enough pedagogical knowledge and skill and assessment techniques</td>
<td>Teachers</td>
<td>103</td>
<td>2.69</td>
<td>1.13</td>
<td>-2.79</td>
<td>102</td>
<td>.01</td>
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<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.75</td>
<td>1.21</td>
<td>-1.42</td>
<td>19</td>
<td>.17</td>
</tr>
<tr>
<td>Experience sharing sessions has been arranged for supervisors</td>
<td>Teachers</td>
<td>103</td>
<td>3.50</td>
<td>.50</td>
<td>10.00</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>3.50</td>
<td>.51</td>
<td>4.35</td>
<td>19</td>
<td>.00</td>
</tr>
<tr>
<td>The grand mean score of respondents’ response</td>
<td>Teachers</td>
<td>103</td>
<td>3.48</td>
<td>.16</td>
<td>30.61</td>
<td>102</td>
<td>.00</td>
</tr>
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<td></td>
<td>Principals</td>
<td>20</td>
<td>3.49</td>
<td>.16</td>
<td>13.88</td>
<td>19</td>
<td>.00</td>
</tr>
</tbody>
</table>

* <3 = Disagree, 3 = somewhat agree, and >3 = Agree

Similarly, the qualitative result obtained from interview and open ended questions support this idea in that instructional supervisors were professionally qualified through providing the required services in the school. Thus, they were trained in fields related to educational planning and management.
The implementation of supervision requires personnel who is equipped with skills and knowledge to be able to carry out his duties with ease. In line with the findings of this study, Neagley and Evans (1970) maintained that the modern supervisor must be capable, well trained in education and psychology, expert in the democratic group process. He recognizes his role as a leader and cooperatively involves his fellow administrators and teachers in all major decisions affecting them and the teaching-learning situation.

Whatever attempt made at any level outside school regarding supervision, the attempt will be meaningless unless supervisory activities are strengthened at school level (MOE, 1995). Instructional supervisors are expected to provide service for teachers to become smart at professional judgments, curriculum development, pedagogy and students’ achievement (MOE, 1995). Hence, teachers gained different benefits from instructional supervisors.

The finding was consistent with the point that explains that says a good supervisor should always be guided by the findings of educational research and should have enough time for good opinion in-group discussion and individual conference. Moreover, the supervisor cannot possibly be expert in all the fields which he coordinates. His knowledge should include the use of resource materials in the school, supervision and improvement of instruction.

**The Role of Supervisors to Support Teachers’ Professional Development**

As shown in Table 2, the results of a one sample t-test of teachers’ and principals’ responses about the role of supervisors to support teachers’ professional development indicated that the grand mean scores of teachers (2.23) and principals (2.26) were lower than the expected mean value (3) at (t= -29.04, df = 102, p < 0.05) and (t = -11.21, df = 19, p < 0.05) respectively. This result showed that supervisors were unable to support teachers so as to advance their profession. Unlike the grand mean score of teachers and principals about the role of supervisors, the results of a one sample t-test of teachers’ and principals’ responses about the role of supervisors to provide induction program for beginner teachers indicated that the mean scores of teachers (3.59) and principals (3.60) were higher than the expected mean value (3) at (t= 12.17, df = 102, p < 0.05) and (t = 5.34, df = 19, p < 0.05) respectively. This implies that supervisors were organizing induction programs for beginner teachers in the school.
Table 2: A one sample t-test of supervisors’ support for teachers’ professional development

<table>
<thead>
<tr>
<th>The role of supervisors to support teachers</th>
<th>Respondents</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Test value: t</th>
<th>df</th>
<th>Sig(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisors organize and support induction programs for beginner teachers in the school.</td>
<td>Teachers</td>
<td>103</td>
<td>3.59</td>
<td>.49</td>
<td>12.17</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>3.60</td>
<td>.50</td>
<td>5.34</td>
<td>19</td>
<td>.00</td>
</tr>
<tr>
<td>Supervisors facilitate professional development through mentoring programs.</td>
<td>Teachers</td>
<td>103</td>
<td>2.40</td>
<td>.49</td>
<td>-12.42</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.40</td>
<td>.50</td>
<td>-5.34</td>
<td>19</td>
<td>.00</td>
</tr>
<tr>
<td>Supervisors provide training to achieve teachers’ professional development.</td>
<td>Teachers</td>
<td>103</td>
<td>1.80</td>
<td>.74</td>
<td>-16.39</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>1.80</td>
<td>.77</td>
<td>-6.99</td>
<td>19</td>
<td>.00</td>
</tr>
<tr>
<td>Supervisors assist teachers to undertake joint planning of experience sharing programs</td>
<td>Teachers</td>
<td>103</td>
<td>2.00</td>
<td>.64</td>
<td>-15.82</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.00</td>
<td>.65</td>
<td>-6.89</td>
<td>19</td>
<td>.00</td>
</tr>
<tr>
<td>Supervisors organize collegial coaching techniques of supervision for teachers CPD</td>
<td>Teachers</td>
<td>103</td>
<td>2.02</td>
<td>.64</td>
<td>-15.63</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.09</td>
<td>.62</td>
<td>-6.54</td>
<td>19</td>
<td>.00</td>
</tr>
<tr>
<td>Supervisors facilitate professional development of teachers through short term training and seminars.</td>
<td>Teachers</td>
<td>103</td>
<td>2.01</td>
<td>.63</td>
<td>-15.85</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.00</td>
<td>.65</td>
<td>-6.28</td>
<td>19</td>
<td>.00</td>
</tr>
<tr>
<td>Supervisors facilitate short term training to teachers’ teaching methods and assessment techniques</td>
<td>Teachers</td>
<td>103</td>
<td>2.00</td>
<td>.64</td>
<td>-15.82</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.10</td>
<td>.64</td>
<td>-6.89</td>
<td>19</td>
<td>.00</td>
</tr>
<tr>
<td>Supervisors support teachers to prepare teaching materials and conduct action research.</td>
<td>Teachers</td>
<td>103</td>
<td>2.01</td>
<td>.63</td>
<td>-15.82</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.05</td>
<td>.69</td>
<td>-6.19</td>
<td>19</td>
<td>.00</td>
</tr>
</tbody>
</table>

The grand mean score of respondents’ response

<table>
<thead>
<tr>
<th>Respondents</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Test value: t</th>
<th>df</th>
<th>Sig(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>103</td>
<td>2.23</td>
<td>.27</td>
<td>-29.04</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td>Principals</td>
<td>20</td>
<td>2.26</td>
<td>.29</td>
<td>-11.21</td>
<td>19</td>
<td>.00</td>
</tr>
</tbody>
</table>

* <3 = Disagree, 3 = somewhat agree, and >3 = Agree

The researcher also found the same result through interview and open ended items about the role of supervisors to support teachers’ professional development. Thus, both group of respondents confirmed that teachers were unable to get instructional support from supervisors to improve their profession. During the interview, one of the supervisors informed that although they repeatedly asked them to arrange experience sharing programs, there was no interest on the part of teachers to participate in professional development training. One of the head of education officers replied that:

“The experience sharing programs do not facilitated by instructional supervisors but teachers simply asked about their allowances and benefits that they obtained. In addition, teachers in primary schools are not interested to share their experiences even those high service holders but school...
Professional development of teachers means helping teachers grow and develop in their understanding of teaching and learning process and improving their teaching skill. Professional development program for teachers should not be something imposed by outsiders. The finding of the current study was consistent with the previous research finding of Speck and Knipe (2001) in that teachers are often unhappy about professional development that is imposed on them from the top. Because teachers are recipients of their professional learning, they should have a great deal of input and ownership in terms of planning, development and implementation of staff development program.

According to MoE (1987), supervision has the duties to help teachers improve professionally organize training programs and give induction orientation to new teachers. Teachers professional development are practiced through the exposure of new information and techniques and are varied based on its requirement of the time and place. Similarly, school heads, department heads and senior teachers are responsible for professional development training program. Continuous professional development practice, on the other side, is concerned with staff collaboration, broadening of pedagogical and subject matter knowledge, strengthening relationships between scholars and research institutions, minimizing the gap between professional requirements and limitations in pre-service teachers training and focuses on capacity building up to the required standards. It emphasizes on empowerment and responsiveness to local needs and demand for higher quality of education. In general, at school level, professional development should meet the need of both the individual teacher and the educational system.

Both quantitative and qualitative findings of the current study indicated that supervisors were unable to support teachers to improve professional development efficiently although there were attempts to facilitate experience sharing programs between teachers. In line with this, (MOE, 2002) indicates that instructional supervisors are not engaged in solving school problems because they went to school only to collect information from the hands of school principals. They do not give necessary support to teachers to improve their profession. Therefore, since competent and skillful teachers are a key component of successful
school, staff development is a major function of instructional supervision. The researcher concluded that instructional supervisors were not facilitating experience sharing programs between teachers to their pedagogical skill improvement.

The Contribution of Instructional Supervision to Improve Instruction
As shown in Table 3, the results of a one sample t-test of teachers’ and principals’ responses about the contribution of instructional supervision for instructional improvement indicated that the grand mean scores of teachers (2.17) and principals (2.18) were lower than the expected mean value (3) at (t = -36.09, df = 102, p < 0.05) and (t = -15.52, df = 19, p < 0.05) respectively. This result showed that the practices of instructional supervision failed to improve teachers’ instructional practice in selected primary schools.

Table 3: A one sample t-test about the contribution of instructional supervision for instructional improvement

<table>
<thead>
<tr>
<th>Contribution of instructional supervision for instructional improvement</th>
<th>Respondents</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Test value: 3 t-value</th>
<th>df</th>
<th>Sig(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional supervisory practices enable teachers to select and use appropriate teaching materials.</td>
<td>Teachers</td>
<td>103</td>
<td>2.00</td>
<td>.64</td>
<td>-15.82</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.00</td>
<td>.65</td>
<td>-6.89</td>
<td>19</td>
<td>.00</td>
</tr>
<tr>
<td>Instructional supervisory practices improve instructional effectiveness.</td>
<td>Teachers</td>
<td>103</td>
<td>2.19</td>
<td>.75</td>
<td>-10.83</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.20</td>
<td>.77</td>
<td>-4.66</td>
<td>19</td>
<td>.00</td>
</tr>
<tr>
<td>Instructional supervisory practices help teachers to solve the actual instructional problems.</td>
<td>Teachers</td>
<td>103</td>
<td>2.20</td>
<td>.40</td>
<td>-19.96</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.20</td>
<td>.41</td>
<td>-8.72</td>
<td>19</td>
<td>.00</td>
</tr>
<tr>
<td>Instructional supervisory practices enable teachers to create cooperative spirit in school community.</td>
<td>Teachers</td>
<td>103</td>
<td>1.99</td>
<td>.63</td>
<td>-16.16</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.00</td>
<td>.65</td>
<td>-6.89</td>
<td>19</td>
<td>.00</td>
</tr>
<tr>
<td>Instructional supervisory practice assists teachers in preparation of supportive teaching materials.</td>
<td>Teachers</td>
<td>103</td>
<td>2.59</td>
<td>.79</td>
<td>-5.18</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.60</td>
<td>.821</td>
<td>-2.18</td>
<td>19</td>
<td>.04</td>
</tr>
<tr>
<td>Instructional supervisory practice help to bring behavioral change on the part of the learners</td>
<td>Teachers</td>
<td>103</td>
<td>2.00</td>
<td>.64</td>
<td>-15.82</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.00</td>
<td>.65</td>
<td>-6.89</td>
<td>19</td>
<td>.00</td>
</tr>
<tr>
<td>Instructional supervisory practice facilitates community involvement in school leadership.</td>
<td>Teachers</td>
<td>103</td>
<td>2.20</td>
<td>.74</td>
<td>-10.84</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.20</td>
<td>.77</td>
<td>-4.66</td>
<td>19</td>
<td>.00</td>
</tr>
<tr>
<td>The grand mean score of respondents’ response</td>
<td>Teachers</td>
<td>103</td>
<td>2.17</td>
<td>.23</td>
<td>-36.09</td>
<td>102</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.18</td>
<td>.24</td>
<td>-15.52</td>
<td>19</td>
<td>.00</td>
</tr>
</tbody>
</table>

* <3 = Disagree, 3 = somewhat agree, and >3 = Agree
Similarly, the qualitative research finding obtained through interview and open ended questions indicated that instructional supervision was not successful to improve classroom instruction due to the fact that teachers were unable to select and use appropriate teaching materials, preparation of supportive teaching materials, create cooperative spirit in school community solve, the actual instructional problems and facilitate community involvement in school leadership. This happened due to low level of awareness on teachers about the purpose of instructional supervision.

It was found that both quantitative and qualitative research findings about the contribution of instructional supervision for instructional improvement, respondents replied that instructional supervision did not improve classroom instruction due to supervisors devoted much time to administrative task at the expense of classroom instruction. Most educators would agree that the improvement of teaching-learning process is fundamental to school reform.

Likely Barr and Button (1961) noted that the aim of supervision is the improvement of the teacher, the growth of the pupil and the improvement of the teaching learning process as a whole. It refers to the supervisors’ works in close collaboration with the school for bringing about improvement in teaching learning process. Similarly, Adms and Dickay (1986) pointed out that, the supervisor is concerned with facilitating and stimulating teachers to improve instruction. This educational service is in fact concerned with the improvement of all activities of the school. As stated by Pajak (1989) the principal mechanism by which supervisors nurture the norm of collective responsibility for the improvement of instruction is by involving teachers in discussions and decisions through workshops and trainings at school level.

In order to bring instructional improvement in the education system, teachers whether they are experienced or not, have to get pedagogical assistance from their supervisors. Similarly, Mohanty (1990) explained that all teachers need supervisory assistance of varying kinds and amounts. Some need it more than others, but its well accepted assistance of the proper nature is needed by teachers at all levels and would be sought if it were considered helpful by teachers and ready in evidence.
Factors that Hinder the Implementation of Instructional Supervision

As shown in Table 4, the results of a one sample t-test of teachers’ and principals’ responses about factors that hinder the implementation of instructional supervision indicated that the grand mean scores of teachers (2.76) and principals (2.76) were lower than the expected mean value (3) at \((t = -5.34, \text{ df } = 102, p < 0.05)\) and \((t = -6.53, \text{ df } = 19, p < 0.05)\) respectively. Contrary to the grand mean score of teachers and principals about factors that hinder the implementation of instructional supervision, the results of a one sample t-test of teachers’ and principals’ responses about supervisors’ qualification related to instructional supervision, indicated that the mean scores of teachers (4.00) and principals (4.00) were higher than the expected mean value (3) at \((t = 15.82, \text{ df } = 102, p < 0.05)\) and \((t = 6.89, \text{ df } = 19, p < 0.05)\) respectively. Thus, both teachers and principals agreed in the presence of adequate material resource; guideline checklist, manuals, stationery materials to carry out instructional supervision.

<table>
<thead>
<tr>
<th>Factors that hinder instructional supervision</th>
<th>Respondents</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Test value: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers perceive instructional supervision as a means to improve instruction.</td>
<td>Teachers</td>
<td>103</td>
<td>2.40</td>
<td>.49</td>
<td>-12.42, 102, .00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.40</td>
<td>.50</td>
<td>-5.34, 19, .00</td>
</tr>
<tr>
<td>Teachers perceive instructional supervision as a means of teachers’ CPD</td>
<td>Teachers</td>
<td>103</td>
<td>2.61</td>
<td>.81</td>
<td>-4.89, 102, .00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.60</td>
<td>.82</td>
<td>-2.18, 19, .00</td>
</tr>
<tr>
<td>Supervisors are specialized in the field related to instructional supervision.</td>
<td>Teachers</td>
<td>103</td>
<td>4.00</td>
<td>.64</td>
<td>15.82, 102, .00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>4.00</td>
<td>.65</td>
<td>6.89, 19, .00</td>
</tr>
<tr>
<td>Adequate budget was allocated for supervision program in schools.</td>
<td>Teachers</td>
<td>103</td>
<td>1.81</td>
<td>.39</td>
<td>-30.50, 102, .00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>1.80</td>
<td>.41</td>
<td>-13.08, 19, .00</td>
</tr>
<tr>
<td>Presence of adequate material resource; guideline checklist, manuals, stationery materials.</td>
<td>Teachers</td>
<td>103</td>
<td>4.01</td>
<td>.64</td>
<td>16.17, 102, .00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>4.00</td>
<td>.65</td>
<td>6.89, 19, .00</td>
</tr>
<tr>
<td>Adequacy of qualified and well experienced supervisory personnel.</td>
<td>Teachers</td>
<td>103</td>
<td>2.41</td>
<td>.49</td>
<td>-12.18, 102, .00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.40</td>
<td>.50</td>
<td>-5.34, 19, .00</td>
</tr>
<tr>
<td>Supervisors create a smooth relationship with teachers for the improvement of instruction.</td>
<td>Teachers</td>
<td>103</td>
<td>2.39</td>
<td>.49</td>
<td>-12.68, 102, .00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.40</td>
<td>.50</td>
<td>-5.34, 19, .00</td>
</tr>
<tr>
<td>Instructional supervisors have enough time to support all teachers instructionally</td>
<td>Teachers</td>
<td>103</td>
<td>2.41</td>
<td>.49</td>
<td>-12.17, 102, .00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.40</td>
<td>.50</td>
<td>-5.34, 19, .00</td>
</tr>
<tr>
<td>Supervisors are getting support from Education Office</td>
<td>Teachers</td>
<td>103</td>
<td>2.80</td>
<td>.76</td>
<td>-2.73, 102, .00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.80</td>
<td>.77</td>
<td>-1.17, 19, .00</td>
</tr>
<tr>
<td>The grand mean score of respondents’ response</td>
<td>Teachers</td>
<td>103</td>
<td>2.76</td>
<td>.16</td>
<td>-5.34, 19, .00</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.76</td>
<td>.18</td>
<td>-6.53, 19, .00</td>
</tr>
</tbody>
</table>

* <3 = Disagree, 3 = somewhat agree, and >3 = Agree*
Similarly, the qualitative result obtained through interview and open ended questions confirmed that the implementation of instructional supervision was unsuccessful due to the above mentioned factors in quantitative analysis. The result of interview and open-ended items indicated that instructional supervisors were overburdened with many tasks. Therefore, almost all of the interviewee who participated in the interview expressed shortage of time to engage in the instructional process. Therefore, based on the response of majority, it is possible to conclude that having workload and lack of budget hinder the performance of instructional supervision.

This result showed that with the exception of supervisors’ qualification and material resources, different factors hinder the implementation of instructional supervision in the selected primary schools. Some of the major factors that hinder the implementation of instructional supervision include: negative perception of teachers towards the practices of supervision, lack of adequate budget, absence of smooth relationship between teachers and supervisors for the improvement of instruction, shortage of time on the part of supervisors to support all teachers in instructional process and unable to get support from Education Office to update their profession.

The finding of the current study was consistent with Fraser as cited in Lilian (2007) in that it depicts that the improvement of the teaching-learning process is dependent upon teacher attitudes towards supervision. This implies that unless teachers perceive supervision as a process of promoting professional growth and student learning, the supervisory exercise will not have the desired effect. Supporting this idea, teachers and supervisors should have a trust between them to develop effective school based supervision; otherwise, when the trust level is low group members will be dishonest and inconsiderable in their communication (Johnson and Johnson, 2000). In addition to this, Pajak (1989) indicated that a good supervisor is one which is capable of communicating with his subordinate in order to provide necessary guidelines and assistance to them for professional improvement. Moreover, shortage of financial resources made the supervisory programs gets weaker. In line with this, Amberber as cited in Haile (2006) stated that due to scarcity of financial resource, supervisory practices unable to implement as expected. Furthermore, MoE (1994) indicated that the big work load of the supervising teachers was a major burden to carry out their supervisory role in the schools.
To sum up, the impeding factors of supervisory activities are believed to be reduced by making supervisory activities professional, well financed and communicated by creating awareness on teachers and supervisors about the objective of school based supervision which is a device to help teachers to improve the teaching learning activities.

The Mean Differences between Teachers’ and Principals’ Responses across Four Major Variable

Table 5 indicated that teachers scored as equivalent as principals in their responses about the qualification of supervisors, roles of supervisors to support teachers’ professional development, contribution of instructional supervision for instructional improvement and factors that hinder the implementation of instructional supervision. Thus, the result of independent sample t-test revealed that statistically significant mean differences were not observed between teachers and principals response about supervisor’ qualification at (t = 0.33, df = 121, p > 0.05), role of supervisors to support teachers’ professional development (t = 0.05, df = 121, p > 0.05), the contribution of instructional supervision to improve the quality of education (t = -0.03, df = 121, p > 0.05) and factors that hinder the implementation of instructional supervision (t = 0.07, df = 121, p > 0.05). This tells that both groups had the same level of understanding about the above four major factors.

Table 5: Independent sample t-test of mean differences of teachers’ and principals’ responses across the four major variables

<table>
<thead>
<tr>
<th>Major variables</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-test for equality means</th>
<th>Mean difference</th>
<th>t-value</th>
<th>df</th>
<th>Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification of supervisors</td>
<td>Teachers</td>
<td>103</td>
<td>3.48</td>
<td>0.16</td>
<td>.013</td>
<td>0.16</td>
<td>.327</td>
<td>121</td>
<td>.744</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>3.46</td>
<td>0.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roles of supervisors to support teachers</td>
<td>Teachers</td>
<td>103</td>
<td>2.23</td>
<td>0.27</td>
<td>.003</td>
<td>-0.01</td>
<td>.048</td>
<td>121</td>
<td>.962</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.23</td>
<td>0.27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructional improvement</td>
<td>Teachers</td>
<td>103</td>
<td>2.17</td>
<td>0.23</td>
<td>-.001</td>
<td>-0.01</td>
<td>.026</td>
<td>121</td>
<td>.980</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.17</td>
<td>0.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factors hinder the practices supervision</td>
<td>Teachers</td>
<td>103</td>
<td>2.76</td>
<td>0.16</td>
<td>.002</td>
<td>0.16</td>
<td>.070</td>
<td>121</td>
<td>.945</td>
</tr>
<tr>
<td></td>
<td>Principals</td>
<td>20</td>
<td>2.75</td>
<td>0.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* <3 = Disagree, 3 = somewhat agree, and >3 = Agree

Strategies of Instructional Supervision

The qualitative data obtained through semi-structured interview and open-ended question about the strategies of instructional supervision, indicated that although there are different strategies designed in schools to improve classroom instruction, still it is not implemented in practice due to different factors.
The result of open ended question indicated that both teachers and principals suggested the following strategies as a means to improve the practice of instructional supervision. These were; supervisors should regularly visit classroom, arrange short term training that help their pedagogical knowledge and skill and arrange experience sharing program. In line with, Fenwick (2001) also stated that professional growth plans could produce transformative effects in teaching practice, greater staff collaboration, decreased teacher anxiety, and increased focus and commitment to learning. They also added that if adequate financial resource allocated, it is possible to fulfill the entire necessary requirement to implement instructional supervision. In addition to this, supervisors should conduct follow up to ensure that the plan and selected program are successful and allow teacher to participate in some forms of professional development to update themselves. Moreover, as they explained every teacher should participate in doing action research to identify the problems that faced and take remedial solution to the problem. In addition, teachers suggested about the presence of incentive strategies to motivate them to exert high level of energy. Providing incentives for teachers is a strategy supervisors can use to motivate teachers to change their instructional practices. Principals also provide incentives by giving formal awards and using public or individual praise for teachers (Hallinger and Murphy, 1985).

However, most teachers were of the view that supervisors should inform them before they visit teachers’ classrooms to observe their lessons. One teacher indicated that principals and teachers should agree on the time and date of the observation before the supervisor observes the lesson. Teachers and principals accepted formal lesson observation as a supervisory practice. To support this idea, Pajak (1989) more briefly depicted that observation is the phase in which the supervisor records instances when the intended behaviors are seen to occur. In similar way, Harris (1991) as cited in Chanyalew (2005) noted that classroom observation is a technique to help teachers improve by identifying specific needs to satisfy their personal and professional career. In short, the most important aspect of school is the quality of teaching and learning in the classroom.

Supervisors and educational officers suggested that teachers should be voluntary to participate in professional development program whenever they are asked to improve classroom instruction. Teachers expect their supervisors to help them alleviate problems related to classroom instruction that needed to be provided on
time. Both group of interviewee explained that in the provision of in-service training for teachers regularly and work load should reduce to teachers instructionally.

One of the heads of education officers said that supervisors should create awareness on the part of teachers about the objective of instructional supervision to improve their instructional practice. In line with this, Smith and Andrews (1989) stated that teachers perceive their supervisors to be strong instructional leaders when they communicate school goals through (a) interacting with the their classroom performance, (b) being accessible to discuss instructional matters, (c) allowing teachers to try new instructional strategies by letting them know that it is okay to take risks, and (d) clearly communicating a vision for the school. In addition, communicating school goals were found to positively affect the type of instruction teachers delivered (Blasé and Roberts, 1994).

He added that school principals should provide incentives for teachers who show best performance in their work because as they suggested, good incentive motivates teachers in order to exert high level energy. To support this, principals motivate teachers to try instructional strategies through rewards such as praise and material rewards (Blasé and Roberts, 1994)). One of the head of education officers said that supervisors should devote much of their time in supervising instruction so as to help teachers to improve their deficiencies in through identifying the problem jointly and then seeking for possible solutions. For Mbamba (1992), the purpose of instructional supervision is to offer personal leadership improvement of educational expertise for pupils. At the same time, it emphasizes on the improvement of professional techniques and procedures.

Finally, the responses found from open-ended items and semi structured interview indicated that they were suggested similar strategies as they were believed to improve the practice of instructional supervision. Thus, most respondents suggested the allocation of sufficient financial resource, provision of professional development program, arranging in service education, allotting sufficient time, asking professional support from higher educational officials, conduct action research, create smooth relationship among different stakeholders and supervising classroom instruction at the expense of administrative task to improve teachers’ instructional practice.
Summary, Conclusions and Recommendations

Summary
A mixed research design was employed to conduct this study. To gather data pertinent to the issue to be researched, the researcher employed both quantitative and quantitative data gathering instruments. That is, closed ended and open ended questionnaire and semi-structured interview were used as data collection instruments. Questionnaire was distributed and its results were tabulated and analyzed with the help of both descriptive and inferential statistical techniques. Pilot study was conducted to check the internal consistency of the items using Cronbach Alpha. The size of population was 368. Of these, 128 respondents were selected as a sample of the study using simple random and comprehensive sampling technique which include 103 teachers, 20 school principals, 3 supervisors and 2 heads of educational officers. Finally, quantitative and qualitative data were analyzed and discussed thematically. The result of this study highly important for educational administrators and policy makers which emphasized on the implementation of instructional supervision to improve teachers’ instructional process. Based on the interpretations and analysis of the data, the following major findings were obtained:

1. As shown in Table 3, the result of a one sample t-test about the professional qualification of supervisors revealed that the grand mean scores of teachers (3.48) and principals (3.49) were significantly higher than the expected mean value (3) at (t =30.61, df = 102, p < 0.05) and (t =13.88, df = 19, p < 0.05) respectively. This result showed that supervisors have high level of understanding about the principle of instructional supervision although they failed to implement as they were expected. Similarly, the qualitative result obtained from interview and open ended question support this idea in that instructional supervisors were professionally qualified to play their roles through providing the required services in the school.

2. As indicated in Table 4, the result of a one sample t-test about the role of supervisors to support teachers’ professional development indicated that the grand mean scores of teachers (2.23) and principals (2.26) were lower than the expected mean value (3) at (t= -29.04, df = 102, p < 0.05) and (t = -11.21, df = 19, p < 0.05) respectively. This result showed that supervisors were not play their role to support teachers so as to advance their profession. The researcher
also found the same result using interview and open ended items about the role of supervisors to support teachers’ professional development.

3. As indicated in Table 5, the results of one sample t-test about the contribution of instructional supervision for instructional improvement indicated that the grand mean scores of teachers (2.17) and principals (2.18) were lower than the expected mean value (3) at (t = -36.09, df = 102, p < 0.05) and (t = -15.52, df = 19, p < 0.05) respectively. This result showed that the practices of instructional supervision failed to improve teachers’ instructional process in selected primary schools.

Similarly, the qualitative research finding obtained through interview and open ended questions indicated that instructional supervision was not successful to improve classroom instruction due to the fact that teachers were unable to select and use appropriate teaching materials, preparation of supportive teaching materials, create cooperative spirit in school community solve, the actual instructional problems and facilitate community involvement in school leadership.

4. As shown in Table 6, the results of a one sample t-test about factors that hamper the implementation of instructional supervision indicated that the grand mean scores of teachers (2.76) and principals (2.76) were lower than the expected mean value (3) at (t = -5.34, df = 102, p < 0.05) and (t = -6.53, df = 19, p < 0.05) respectively. Contrary to the grand mean score of teachers and principals about factors that hinder instructional supervision implementation, the results of a one sample t-test about supervisors’ qualification related to instructional supervision indicated that the mean scores of teachers (4.00) and principals (4.00) were higher than the expected mean value (3) at (t = 15.82, df = 102, p < 0.05) and (t = 6.89, df = 19, p < 0.05) respectively. Similarly, the qualitative result obtained through interview and open ended questions confirmed that the implementation of instructional supervision was unsuccessful.

5. Table 7 indicated that the result of independent sample t-test revealed that statistically significant mean differences were not observed between teachers and principals response about supervisor’ qualification at (t = 0.33, df = 121, p > 0.05), role of supervisors to support teachers’ professional development (t = 0.05, df = 121, p > 0.05), the contribution of instructional supervision to improve the quality of education (t = -0.03, df = 121, p > 0.05) and factors that hinder
the implementation of instructional supervision (t = 0.07, df = 121, p > 0.05). This tells that both groups had the same level of understanding about the about the qualification of supervisors, roles of supervisors to support teachers’ professional development, contribution of instructional supervision for instructional improvement and factors that hinder the implementation of instructional supervision.

6. Finally, the qualitative data obtained through semi-structured interview and open-ended question about the strategies of instructional supervision, respondents indicated that although there were different strategies designed in schools to improve classroom instruction, still it does not implement in practice due to low awareness on the part of teachers about the purpose of instructional supervision. Thus, the result of open ended question and interview pointed out the following strategies as a means to improve the practice of instructional supervision. These were; supervise classroom instruction, there should be awareness creation program, arrange short term training and experience sharing program, allocation of sufficient financial resource, provision of professional development program, allotting sufficient time, asking professional support from higher educational officials, create smooth relationship among different stakeholders and supervising classroom instruction at the expense of administrative task.

Conclusions
The purpose of this study was to assess the implementation of instructional supervision in primary schools of Aksum Town. The researcher found both positive and negative quantitative and qualitative results about the practice of instructional supervision. Both survey and interview results indicated that the implementation of instructional supervision was unsuccessful due to organizational and personal factors.

Based on the results of the present study, the following conclusions were drawn;

- Supervisors were professionally qualified although they failed to play their role through providing the required services in the school as they were expected.
- Teachers did not get enough professional support from supervisors to improve classroom instruction as well as enhance their professional growth. Due to this, teachers’ instructional skills in the classroom were limited.
• The practices of instructional supervision is insufficient to improve teachers’ instructional practice in selected primary schools due to low awareness of teachers about the purpose of instructional supervision.

• The implementation of instructional supervision was unsuccessful due to negative perception of teachers towards the practices of supervision, lack of adequate budget, absence of smooth relationship between teachers and supervisors for the improvement of instruction and shortage of time on the part of supervisors to support teachers instructionally.

• Allocation of sufficient financial resource, creating awareness on teachers about supervision, arrange sufficient professional development training and experience sharing program, allotting sufficient time, conduct action research, create smooth relationship among different stakeholders and supervising classroom instruction at the expense of administrative task were some of the strategies suggested by the research respondents.

• Finally, the writer of this research strongly believes that if instructional supervision properly designed and implemented, teachers’ instructional practice will improve so as to bring change on the part of the learners.

Recommendation
Based on the findings of this study, the researcher recommended the following points to teachers, school principals, supervisors and heads of educational officers:

1. Supervisors are recommended to create awareness on the part of teachers about the purpose of instructional supervision to have positive attitude towards the practices of supervision and perceive it as a means to solve problems related to classroom instruction.

2. Teachers are required to be committed to participate in different form of training to improve their profession and conduct action research to give remedial solution for classroom difficulties.

3. Supervisors are advised to develop their pedagogical knowledge and skill to support teachers so as to improve instructional process and observe classroom instruction regularly through devoting much time at the expense of administrative tasks to identify learning difficulties.

4. Supervisors are needed to arrange short term training and experience sharing program to support teachers to prepare different instructional materials, conduct action, arrange short term training to teachers continuously; use
effective teaching methods and wide range of assessment techniques to evaluate students’ performance.

5. School principals are expected to give sufficient time to teachers to participate in some form of professional development program and praise teachers with outstanding performance.

6. Heads of educational officers are wanted to allocate sufficient financial resources to carry out the activities of instructional supervision and give support for school personnel whenever necessary.

7. Further researches need be conducted in order to see the progress of instructional supervision across zones, regions and nations as this study emphasized on specific area, which was not covered large areas.

References


Understanding School Governing Bodies’ Perceptions of Quality Education and Underlying Processes: The Case of Chasa Primary School, Nekemte, Ethiopia

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Abstract

The purpose of the study was to explore primary school governors’ perception of quality education and to understand their view of key processes that underlie it. From qualitative approach traditions, case study design was employed. Social Justice Capability approach was used as a theoretical framework. Multiple personal interviews, focus group discussion, observation checklists and document reviews were used as methods of data collection. Eight primary school governors were included using purposive sampling. The data, which include: the verbatim transcription of our conversation and field notes was presented and analyzed searching for themes and connecting threads. The findings shows that the school governing bodies’ understanding of good quality primary education is almost similar to experts’ definition; however, it is not well mapped and communicated. Subjects identified five key elements of quality education: teachers’ competences, adequacy of text books, students’ individual and team effort, school’s valuing quality education as its mission, and focus on achievement. In grades one to four the existences of non-reader and non-writer students were noted, which corresponded with seven ingredients that might have endangered the provision of good quality education: instructional time wastage; un installment of assessment mechanism; wrong promotion policy implementation; impoverished learners’ home environment; limited parental support; existence of non-effective and shaky school governing board, and the mismatch between practitioners’ belief and policy expectations. The study implied the need to offer new, profound and uninterrupted training to stakeholders and reinforce adult education.

Keywords: Quality primary education, school governance, governance, school board.
Background

Good quality primary education is widely believed to be important because it has multiple functions including: improving agricultural productivity, transferring necessary knowledge and skills needed, imparting basic cognitive skills, promoting values, norms and beliefs that keep society together, promoting human right and reducing social inequality (Aghion, Meghin, and Vandenbussche, 2006; Hanushek and Wößmann, 2008; Lucas, 1988; Mankiw, Romer, and Wei, 1992; Nelson and Phelps, 1966; Oduro, Dachi and Fertig, 2008; Romer, 1990). However, the concept good quality education is an elusive one and not well understood. In agreement, Oduro, Dachi and Fertig (2008) pointed out that “attempts to define ‘educational quality’ are legion, as the very concept of ‘quality’ is an evasive one” (p. 3). In an effort of indicating what a quality education constitutes, UNICEF (2000) emphasized the provision and existence of five dimensions:

1. [H]ealthy, well-nourished and ready learners; 2. healthy, well furnished facilities and safe environment; 3. relevant curriculum; 4. the process in which trained teachers apply learner-centered teaching method and effective assessment techniques in classroom and school teaching; and 5. outcomes that include knowledge, skill and attitude founded on the rights of the whole child, and all children, to survival, protection, development and participation” (p. 2).

Further, UNESCO (2008) have singled out some common elements of quality education including “…to cover certain basic knowledge, values, competencies and behaviors that are specifically attuned to globalization but reflect the beauty and richness of our diversity expressed in different forms of belief, spirituality, culture and language” (p.9). Absence of complete coincidence on the aspects of the nature of good quality education shows the elusive nature of the concept, the processes that underlie it and non-uniformity of the measures taken to ensure quality education.

Noting processes that ensure good quality primary education remained the point of inquiry. One main assumption was that good quality primary education is believed to be obtained from effective primary schools. Schools are said to be effective when students’ achievement are above (or up to) the set standard. Scanlo, Earley and Evans (1999) had shown the existence of clear association between effective schools and effective governing bodies. Several studies (Jadal, 2012; McCrone, Southcott and George, 2011; Mestry, 2007; Ofseted, 2011; Perry, 2011; Wylie,
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2007) noted school governing bodies make significant contributions in ensuring school effectiveness. Perry (2011) also noted that effective governing bodies have clearly defined roles and responsibilities, good communication with the principal, an effective chair and regular performance monitoring. The key to effective governance is renowned to be governors having a clear understanding of their role (and limits) and strategic responsibilities (McCrone, Southcott, and George, 2011). In line with this, Ofseted (2011) documented that governors’ having absolute clarity about their roles and responsibilities is the main characteristics of effective schools in UK. To make schools effective and students achieve better, besides having effective governing bodies, several studies (Bolívar-Botía and Bolívar-Ruano, 2011; Castagno, 2008; Hughes, Chen, and Kwok, 2008; Peters, 2008) indicated the need to apply learner-centered leadership & achievement focused school management.

As an alternative measure of educational quality, some studies (Hanshek and Wößmann, 2008; Michaelowa, 2001; Oduro, Dachi and Fertilg, 2008; Williams, 2000) indicate that good quality education is signaled better by academic achievement. More specifically, Willms (2000) pointed out that quality primary education can be measured using standardized test achievements in literacy and numeracy. Michaelowa (2001), further, distinguished that learning achievement is the most obvious indicator of education quality. Hanushek and Wößmann (2008) noted that the measure of quality of education is a simple average of the mathematics and science scores over international tests and can be interpreted as a substitute for the average educational performance of the whole labor force. Thus, it can be understood that quality education indicators have multiple dimensions like proficiency in literacy, numeracy, basic skills, relevance of curriculum and effective leadership.

Even if defining and describing the constituents of good quality education remained evasive, interestingly, accessing good quality primary education to all have been a benevolent goal for all nations’ of the world long since the declaration of human right (see article 26 in UN, 1950), which forced all nation states and their respective functionaries to further the expansion of education. The good intention that seeks to maintain quality in the context of quantitative expansion has made educational quality a topic of intense interest in developing countries (Leu and Price-Rom, 2006). To coordinate local efforts and ensure quality, the government of Ethiopia has installed decentralized educational management system that authorized primary school governing bodies with a power to rule over every aspect of
educational activities of schools under their jurisdiction (MoE, 2001). The government of Ethiopia has also developed a general education quality strategy document, which discusses the issue of quality education with respect to competence and adequacy level of teachers; adequacy of student texts, other teaching aids, library and laboratory; students-teacher ratio; relevance of the curriculum, employing student-centered teaching method, issuing primary education with mother tongue, using information communication technology, reducing drop outs and repetition and decentralizing educational organization and management (MoE, 2007, p.5-11). As to my knowledge, all these points raised by the policy document are worthy in defining and evaluating quality education. In the same document six general education quality improvement strategies of were spelt out including: 1) promoting teachers’ development program; 2) supporting school improvement program; 3) furthering civic and ethical education program; 4) improving the relevance of curriculum; 5) expanding the information communication technology services; and 6) improving educational management, practice and organization (MoE, 2007, p. 12). However, there is little or no information on what (and how) primary school governors are doing to ensure quality primary education in Ethiopia. This report is an exploration of primary school governors’ perspectives on the concept quality education and key processes underlying good quality education, which is a result of the qualitative inquiry that I conducted in a public urban primary school located in the western Oromia regional state, Ethiopia, from October 2014 to February, 2015. Addressing the issue of good quality primary education and the underlying processes is important because quality education has a capacity to enhance economic growth; reduce inequality (Oduro, Dachi, and Fertig, 2008); and promote human right.

**Statement of the Problem and Rationale of the Study**

The concept good quality primary education is not well described, modeled, mapped and communicated to teachers, principals, school governing board, parents, and community partly because the concept is vague and sufficient dialogue is not made on it. On the other hand, there is no record that shows the attempts made by school governing bodies to ensure quality and lessons learned from their practices. Further, to my knowledge, so far there was no research report in the nation that documented the perceptions and views of primary school governing bodies on quality education and underlying processes.
Decision about studying *Chasa* primary school was reached at after obtaining sufficient justification from supervisors at regional educational bureau indicating that the school performed very well for the last three years consecutively- both in terms of parental involvement, community mobilization, student achievement and student discipline,- all of which are pertinent to quality. Thus, necessitated by scarcity (or lack) of information , and also augmented with the intention of learning from their best practices, the views and perceptions of *Chasa* primary school governing bodies’ core leaders were studied.

The principal objective of the study was to explore primary school governors’ perceptions of quality education and understand the subjects’ perspectives on key processes(teaching learning, home and community situations) underlying quality education.

**Theoretical Framework:** The Educational Quality Framework: Social Justice Capability Approach or EdQual Model

The social justice capability framework (Tikly and Barett, 2011), which is also called EdQual model, is chosen as the study’s theoretical framework since it is framed for improving access and quality in Africa. The model defines good quality education (Tikly and Barett, 2011) as:

*The one that enables all learners to realize the capabilities they require to become economically productive, develop sustainable livelihoods, contribute to peaceful and democratic societies and enhance wellbeing. The learning outcomes that are required vary according to context but at the end of the basic education cycle must include threshold levels of literacy and numeracy and life skills including awareness and prevention of disease (p.12).*

Tikly and Barett (2011) notes that their framework is based on the capabilities work that assumes educational outcomes such as literacy, numeracy, basic scientific knowledge, autonomy, critical thinking and emotional intelligence as products of good quality education. They figured out that three principles (that education be inclusive, relevant and democratic) of capabilities serve their model in similar way. These are:

*Firstly, that education should be inclusive, which draws attention to the access of different groups of learners to quality inputs that facilitate the development of their capabilities and removal of economic, cultural and institutional barriers that*
The impact on the learning of different groups. The second principle is that a quality education must be relevant, i.e. that learning outcomes must contribute to sustainable livelihoods and wellbeing for all learners, must be valued by their communities. The third principle is that education should be democratic in the sense that learning outcomes are determined through public debate and ensured through processes of accountability (Tikly and Barett, 2011, p.5)

The central focus of the framework is noted by same authors to be: “that good quality education arises from interactions between three overlapping environments, namely the policy, the school and the home/community environments” (Tikly and Barett, 2011, p. 13). According to Tikly and Barett (2011), creating a good quality education involves paying attention to “closing the gaps”- three gaps: the implementation gap, the expectation gap and the learning gap (p. 13). The EdQual model further elaborates strategies that help to overcome the gaps as follows:

Overcoming the so-called “implementation gap” between national policy and its implementation at the school level requires engaging with the experiences and views of teachers and head teachers, ensuring that initial and continuing professional development opportunities are consistent with the demands of new curricula and other initiatives, and providing support for schools in implementing and monitoring change. Closing the “expectations gap” between the outcomes of education and what parents and communities expect education systems to deliver requires paying attention to the relevance of the curriculum, listening to the voices of parents and of communities in national debates and developing greater accountability within the system. Addressing the “learning gap” that often exists between learning that takes place in schools and the home/ community environment requires focusing on the health and nutrition of learners and working with parents to create an enabling home environment to support learning. (p. 14)

Finally, according to the EdQual framework there are five quality inputs and five key processes that determine educational outcomes in low income countries (Tikly and Barett, 2011). The quality inputs are: 1. suitably trained, experienced and motivated teachers; 2. head teacher training; 3. appropriate textbooks and learning materials; 4. investing in basic infrastructure and resources including ICTs; and 5. school feeding, child health and early childhood development; whereas, the key processes underlying a good quality education include: 1. a national debate on education quality; 2. improved accountability and parent/ community voice; 3.
effective assessment, monitoring and evaluation of quality; 4. a relevant and inclusive curriculum and pedagogy; and 5. School, home and community links.

**The Research Methodology and Methods Used:**
Qualitative research approach, specifically case study was employed appropriately as the study seeks meaning people give to human problems (in this case quality primary education and processes that underlie it) in a natural setting (Creswell, 2007). Case study was applied as it helps to investigate a bounded system using multiple tools of detailed data collection (Creswell, 2007).

**Population, Sampling Technique, Sample Size and Participants**
As the study aimed at exploring the perception and understanding of school governing bodies on quality primary education, seven members of the school governing board members and the nine parent teachers joint committee members, make the total population of the study 16 persons (out of which five are teachers). Eight participants (1. the school principal, 2. the school board chair, 3. the parent teacher committee chair, three parent members and 4. a teacher) were included in the study purposively. These informants were selected because of their influential leadership and membership role in the school governing. In terms of age, gender, educational level and type of governing body committee they serve, characteristics of all the four participants are presented as follows: First, the primary school director (TSD) – male, age 40 years, have diploma in social science stream from teachers training and served the primary school under investigation in principal ship position for the last three years without having training in school leadership; Second, the village chief administrator who was the school’s governing board chair (SGBC) for the last five years; male, age 32, educational level: grade 12; Third. the parents-teachers joint committee chair (PTJC): male, age: 58, a father of two school children learning in the school, has served as a committee chair for the last eight years and is a priest, currently pursuing college education in private college majoring Management, in extension program; and, Fourth, the school teacher (TST), male, age 34, has a degree in Mathematics, teaching experience of more than five years in the school and a member of the school curriculum committee for the last three years. Fifth, the three parent members’ were within age range of 40 to 44 years. Their educational background was between grades 8 to 10.
Method of Data Collection

Multiple personal interviews, focus group discussion, observation checklists and document reviews were used as methods of data collection. Data regarding the context was collected from multiple sources: using observation checklist, interview guide and document analysis while data regarding perception and understanding of subjects was collected mainly using multiple personal interview. Interview is a widely used tool to access people’s experiences and their inner perceptions, attitudes, and feelings of reality. Interviewing is the best approach than observation for individuals who share a particular trait (in this case being member of school governing bodies) but do not form sociological groups (Bogdan and Biklen, 2003).

Procedures of Data Collection

After having prepared semi-structured interview guide (which was narrowed after every interview), a letter from Educational Planning and Management department of AAU that asks official support for my study was collected and submitted to Chasa primary school director, went to research site and visited the school, found the school director, introduced myself to him, submitted the official letter and briefed him with the purpose of my study and secured permission. The next step was to hang around, select informants, negotiate and obtain their written and signed consent; introduce myself and the purpose of the research, try to build trust and establish rapport with each of the four participants before running the interview as per the advice of Fontona and Fery (2005). Eventually, after written consent of participation was obtained, I have conducted individual, face-to-face verbal interchange, semi structured interviews with each of the four participants; for a length of about 90 minutes in two sessions with a principal and a teacher, and for about one hour with each committee chair persons to create a narration as suggested by Fontona and Fery (2005).

I have protected the identity of my informants by using pseudo names right from the beginning. With the permission of subjects, audio tape was used to record our conversation, while actively listening to the subject’s response during interview sessions; I probed for deeper understanding and also took note. Personal reflections were written after every interview session. After completion of the interview program, careful verbatim transcription of the audio-recorded data (56 pages of word document) was done.
Data Presentation
I read, re-read several times the data (interview transcripts, field notes and my memos) and got it edited. Then, similar items were collected together under the same category and organized under six different themes (see the finding section). Perspectives held by subjects that included shared rules, norms and their ways of thinking about quality primary education and underlying processes were used as basis for categorizing. In this report, data is presented by making a statement and illustrate the statement with several examples keeping the evidence separate from summaries as mentioned by Bogdan and Biklen (2003) to illustrate that my abstractions are grounded in what subjects have narrated.

Data Analysis and Interpretation
Analysis was started while in field by summarizing it and continued afterwards by answering questions: what is important in the data? Why is it important? What can be learned from that? So what? Together with searching linkage between themes and categories, repeated data reduction, was done. Data reduction was done by summarizing what was in the data. This is appropriate as data analysis in qualitative research involves summarizing data in a dependable and accurate manner. Actually, multi stage process of organizing, categorizing, synthesizing, analyzing, and writing about the data were undertaken while reading and re-reading, memoing, describing, classifying and interpreting as mentioned by Gay, Mills and Airasian (2009). The analysis was extended by contextualizing the result in existing literature and also linking with a theory as indicated by Gay, Mills and Airasian (2009).

Findings
The School: Teachers, Infrastructure, Student to Teacher Ratio, Student to Textbook Ratio
The primary school under inquiry, presented here under a pseudo name Chasa primary school, is a public school, run by government, located in the western part of Oromia regional state, Ethiopia, is under operation for 40 years. Currently, the school is constructed and furnished with seats, desks and blackboards by the generous support obtained from donors (subjects do not know) through the coordination effort of one national church’s development office. Except for the irregularity of water supply services and shortage of books in library, the school under inquiry has a well built school structure; latrine of good standard for teachers and students, in both cases separate for males and females; and clean and safe
The school had 40 teachers in the academic year 2014/15; out of which 13 of them have bachelor degree level training, 23 have diploma and also pursuing first degree in evening, summer and distance program and only two senior teachers have certificate level training indicating that the qualification level of teachers is by far above the national requirement that demands diploma level training for primary school (MoE, 2007, p.17). The total number of students enrolled to the school under investigation has increased from 1548 in the year 2013/14 to 1626 in 2014/15. The students’ teacher ratio in Chasa primary school in 2014/15 was found to be 40.65:1, when compared to MoE (2008) the national student teacher ratio data (p. 6), which was 57.9, indicates the existence of sufficient number of teachers both in terms of qualification and specialization.

Children of the Poor Drop School to Work
Out of the total 1626 enrolled students in the year 2014/15, 90 under privileged, school age, students (more of whom were females) dropped out school to work (domestic works for the backer) for their survival.

Parents and Students’ Home: Poor Illiterate Parents Provide Very Limited Support at Home
Most of the parents of the school under inquiry are poor. They get their living from daily labor income. They often do agricultural works (like tilling, digging, cultivating, weeding, harvesting, herding and etc.); some are involved in making charcoal, collecting and moving fire wood to towns for sales, which is arduous to the individual, non-friendly to the environment, and the gain from such work is also very low. Some poor parents of the school under investigation live in a town and get their earnings from hauling and transporting goods, winnowing grains, doing road side trading and so on, which indicates that their occupation is irregular kind and attracts very low income. The homes of most of the school’s students (those that come both from rural and urban setting) is inconvenient for studying as it lacks necessary materials for reading and writing like benches, light and food.

Kindergarten, Adult and Alternative Basic Education of Some Extent
To attain the goal of accessing primary education for all before or by the year 2015, besides operating regular primary school, the school under scrutiny conducts adult education program in the evening, runs kindergarten education for preschool children within the school compound and offers a distinctive educational program for older ones namely ‘alternative basic education’, which enable students to
complete four years education (of grades one to four) within two years whose successful completion will entitle enrollment to fifth grade.

**Subjects’ Definition of the Concept Good Quality Primary Education:** The school director (TSD) noted the absence of clear understanding of the meaning and value of quality education in her/his locality. S/he said:

*The community has not understood the importance of good quality education. What they are doing at length is only sending students to schools. Most parents, for example, do not supervise the education of their children, they do not check whether children do their homework or not. (TSD)*

In agreement, the village chief extends the argument that quality education is not well understood by the community as well by some educators. The school governing board chair (SGBC) added: “The meaning given to quality education, leave alone the community, is not clear among our school leaders and teachers” (SGBC). The notion that says parents and local community members have not well understood the meaning and value of quality primary education and as a result not doing proper things to their children implies that awareness creation might generate difference.

Even if the meaning and value of good quality education is claimed to have been not well understood in the village community, when asked, the school governing board’s chair and the school teacher (TST) suggested their own respective definitions of good quality primary education as follows:

*We can define quality education as the education that enables them read, write, comprehend and numerate. Primary school students between grades one to four who received good quality education can read, write, add, subtract, multiply, divide and comprehend…. (SGBC)*

*Quality primary education is education that makes a student capable at her/his level…. In grade one, students are first taught their mother language alphabets, followed by letter combinations, reading and then writing; nearly by the end of first grade, students will be able to write their names,… distinguish basic skills of arithmetic; and start learning from their natural environment through field observation and doing practical activities in class rooms individually as well as in group. (TST)*
The two subjects’ statements can be synthesized together and provide their understanding of good quality primary education. It can be said that subjects perceive good quality primary education as the kind of education that makes students capable to read, write, numerate, comprehend, describe and explain the phenomenon in their environment, be ethical and be able to make necessary adjustment to their corresponding surroundings. From this one can understand that expert like correct definition, which expresses good quality education in terms of capability and proficiency exists within members (educator and non-educator) of Chasa primary school governing bodies.

**Subjects’ View of Educational Outcomes: Students’ Proficiency in Literacy and Numeracy**

The school teacher tells the existence of some students who are non-readers and non-writers in grades one to four. S/he said, “There are some non-readers and non-writers in grades one to four. They are not many....” To this, the school director adds: “There are some students who cannot read and write in the first cycle of the primary school where only one person teaches students of one section all subjects”. Both evidences confirm the existence of some students who are non-reader and non-writers in lower cycle of Chasa primary school.

According to the school teacher, students’ lack of proper devotion to learning and some teachers’ absenteeism resulted in the existence of some non-readers and non-writers. When asked why do some students lack learning motivation? S/he noted: “Students of grade one; for example, are kids and usually fond of plays and as a result may not concentrate on learning...There are some teachers who come late to school and waste time”. To this, the school director added that absence of grade-level assessment mechanism, free promotion of grades one to four students without testing proficiency level, and instructional time wastage because of teachers’ absenteeism contributed to the existence of non-readers and non-writers. S/he said:

*There is a well developed standard to check against the competence level of students of every grade .... The problem is we have not installed the mechanism to regulate literacy and numeracy;...teachers[of grades one to four] teach same section students all subjects and allowed free promotion of children without confirming the child’s mastery of basic skills in literacy and numeracy. There was a notion that says a student fail is a teachers fail. For the fear of not being said a*
failure, all teachers of grades one to four allow free promotion of all students to next grade.... One can ask a question, why shouldn't management take measures when teachers fail to meet this goal? The management of school also shares the failure, mainly the assistance directors.” (TSD)

In summary, according to both the school director and the governor teacher, instructional time wastage because of teacher absenteeism, un installment of grade level assessment mechanism, free promotion of non-qualified students to next grades mainly from grades one to four and less students’ dedication have resulted in the existence of non-readers and non-writers in Chasa primary school.

Furthermore, as both the school teacher governor and the school director verify it; instructional time wastage because of teachers’ absenteeism is a frequent phenomenon. However, the school director complains that disciplining teachers is out of the school management’s jurisdiction. The school director argues that if the public school management is authorized to discipline teachers just like private schools in his locality, he assumes, to ensure better quality education. Currently, school authorities are not authorized to take strong disciplinary measures on teachers. My preference is to maintain the existing practice, because, as I think, that helps to protect teachers’ right from violation, as currently most school principals are not professionally trained school leaders. However, the school management and its governing bodies have to seek local level mechanisms to overcome teacher absenteeism as; otherwise, it can greatly affect quality education.

Subjects View of How to Ensure Good Quality Education

Teachers’ Capabilities, Proper Utilization of Textbooks, Reference Books and Other Educational Materials as Main Elements. According to the school governing board chair, the school teacher and the principal, teachers’ qualification level, their competence and readiness are the major aspects of ensuring good quality education. The village chair recognized: “Good quality education comes from the qualification level of teachers. Diploma and degree holding teachers teaching in primary schools are said to offer good quality education, whereas low quality education is given by teachers with certificate and less educational levels”. The school teacher also noted: “To offer good quality education, the first thing to correct is the views and attitudes of teachers towards quality education. The second is to improve teachers’ competence. The two need to match together”. To these, the
school director added: “To ensure quality education, the major role is played by the teacher. If the teachers’ competence, capability and outlook are accurately combined together; then s/he can deliver good quality education”.

Besides capability of teachers, the three above mentioned subjects underlined also the importance of textbooks, reference books and educational materials.

The other important factor is the availability of textbooks and technically fit materials. But the determinant factor is the readiness of teachers. (SGBC) Students need to have sufficient books. The school must be furnished with necessary materials like blackboards, library etc. (TST). Besides, students also have to follow their teachers and textbooks by linking the lessons they learn with existing local situations. (TSD)

Added together, the subjects understanding of mechanisms that help to ensure quality education incorporate varied elements. Teachers’ capabilities, which include their subject matter knowledge, their proficiency in pedagogy and their attitude towards the profession and learners is considered by subjects as the main constituent of quality process. Proper utilization of textbooks, reference books and other educational materials were also considered to have contribution to quality education.

The School Governing Boards’ Role in Quality Education: According to the school governing board chair, the school governing board, which is the highest governing body of the school, is found to be non-effective, shaky and not strong as there is frequent coming in and going out of members to and from the school board.

The [school governing] board lacks strength as it had no sufficient training….Moreover; members of the board who represent a segment of the community are frequently substituted by another. As a consequence, the board does not know its role to better extent; usually the school director prepares an agenda and calls for meeting whenever students or teachers make disciplinary problems.(SGBC)

The school governance board chair further noted that the board does not communicate the school board's works to higher organs, which implies that the
school board receives no (or) little support from higher officials to dispatch to the school management.

*We do not report about the specific school situations to the village council... And, there is no direct relationship between the school board and education offices. The school governing board and the district/municipal education office are connected to each other through the school director as education offices get reports of works of the board from school directors.* (SGBC)

The school governing board, which is the highest governing body of the school, presided over by the village chief, consists of four out of seven members drawn from community while the remaining three (a principal and two teachers) are from the school, governs the overall work of the school. It is found to be not-effective as its members do not know their roles and responsibilities. The school governing board makes involvement in planning and decision-making of the school but has not made quality education the mission of the school.

**The School Management’s Role and Quality Education**

The school teacher recognized the important role school management plays in ensuring quality education as:

> In ensuring quality education, school management has a great role including preparing seats, providing clean classrooms, textbooks, library, and in creating conducive environment... The director is diploma holder majoring social science; has a good capacity in coordinating works, focuses on learning, makes class visits, frequently calls the school curriculum committee and members of student council for consultation whenever s/he observes certain kind of irregularities. (TST)

To this, the school director also added:

*The points of our focus are improving students’ score and ensuring student discipline... We emphasize on improving students’ performance on exams, their ethical conditions and participation in developmental activities.* (TSD)

Although the school principal is not trained in school administration, her/his emphasis on students’ achievement, order maintenance, and creation of suitable teaching learning environment had positive contribution to quality education. To add
up, subjects underscored the following elements to be better strategies to enhance good quality education: 1. teachers competences and readiness; 2. efforts student make to follow strictly teachers’ instruction and textbooks; 3. school governing bodies’ valuing quality education as the mission of the school; and 4. the school management’s focus on student achievement and discipline; however, not recognized the need for having professional school principal.

Subjects’ View of the Changes Made Since Two Years
According to the school teacher, the school shifted instructional method recently from traditional lecture method to learner centered method. S/he noted:

*In the past, we used to employ the lecture method. Beginning from last year, academic year 2009/10, after we have received training on active learning approach, we are employing a teaching–learning process that fully involves students.* (TST)

The school director described as at length the radiant progress made afterwards as follows:

*After employing active learning teaching approach and continuous assessment technique, with provisions of supplementary lessons and additional tutorials, we have made great improvement in student achievement. Students’ average mark which was 62 in the year 2009/10 has increased to 70 in the academic the year 2010/11. We also have managed to reduce the total number of failures in the school (from grades one through seven) from 149 students in the year 2009/10 to 78 students in academic the year 2010/11.... We have managed to restore back our first rank out of all primary schools in the town in student achievement. Two of our seventh grade students (one female and one male) scored 100 each in mathematics and natural sciences. They won medals from regional government.”* (TSD)

From these statements of the school teacher and the school director, one can understand that the change made in classroom instruction methods from traditional teacher centered to learner–centered approach induced better student involvement. In addition to this, the continuous assessment method employed also forced students to regularly attend classes and remain active in classes as they never know when quizzes appear. On top of these, supplementary lessons and
additional tutorials were offered by all school teachers out of regular school times within the school compound, which had increased instructional time compensating wastage.

Conclusions

Chasa public primary school governing bodies perceive good quality primary education as the kind of education that makes students capable to read, write, numerate, comprehend, describe and explain the phenomenon in their environment, be ethical and able to make necessary adjustment to their corresponding surroundings. The subjects’ definition and understanding of quality education nearly matches with that of the Edqual’s working definition (Tikly and Barratte, 2011) showing that the primary school governors’ understanding of the meaning of quality primary education is much close to that of leading experts’ in the field. However, general consensus has not yet been created about the meaning of the concept by all stakeholders including educational leaders, teachers, parents, and the community in the school under study as it is not well mapped and communicated signifying the absence of adequate policy dialogue at local level. As there is adequate knowledge within members about good quality primary education, the school management is advised to facilitate local level discussion on the issue of quality education, make the issue an agenda, which will help to create consensus and improve stakeholders’ involvement.

Some non-reader and non-writer students existed in the lower grades of the primary cycle (grades one to four). The existence of low proficiency in literacy and numeracy was attributed to: instructional time wastage because of teacher absenteeism; wrong implementation of grades one to four promotion policy; un installment of effective students’ achievement assessment; poor student discipline to some degree; and little/ none parental supervision to students’ learning as most parents are illiterate.

The fact that the school has not put the grade-level assessment mechanism into effect and have not implemented the first cycle primary level promotion policy implies that teacher’s, assistant principals and the school’s principal have poor understanding of (or less commitment to) the education and training policy directives. In line with Tikly and Barrette (2011), to overcome the implementation gap at school level, the municipal education office is advised to help the school governing bodies to fix views and experiences of teachers and vice principals,
provide training to teachers and school governing board members, and support the school principal in implementing and monitoring change.

The conclusion that says instructional time wastage has contributed to the existence of non-readers and non-writers in the school under study also fits with existing literature. UNICEF (2000), for example, documented that, “... efficient use of school time has a significant impact on student learning” (UNICEF, 2000, p. 13). UNESCO (2011) also further noted that “real teaching time matters…. Teacher absenteeism and time spent off task during lessons can significantly reduce the number of hours that children are actually taught” (p. 104). The school management and its governing bodies have to seek local level mechanisms to overcome teacher absenteeism as; otherwise, it can greatly affect quality education.

In line with the conclusion that says low parental involvement made home learning minimal in Chasa primary school, Epstein (2011) noted that parental expectation and home support greatly influence students’ achievement. Besides classroom instructions, the vital role of parental involvement in improving students’ achievement was noted by UNICEF (2000) as: “higher levels of parental involvement that includes parents reading to young children is associated with higher test scores and lower rates of grade repetition in primary school” (p. 5). Cognizant of the role parents could play in helping students do their home works, Tikly (2010) advises empowering parents through adult education. However, little or none was done in the school under investigation to help parents improve their education and their home environments. The schools under scrutiny and its governing bodies have to encourage all parents who have not completed primary education to attend adult education. The school and governing bodies need to ensure that parents are informed to make their homes suitable for learning. Encourage the provision of necessary materials like chair, bench, books, and also, assigning space and time for home learning have to be emphasized. Strengthening home–school link possibly through teachers’ going to students’ home, visit parents and talk about the education of their student child. Further research on how to promote adult education and empower parents seems to me worthy.

The school governing bodies at Chasa primary view the following elements to be better strategies to enhance good quality education: 1. teachers competences and readiness; 2. proper utilization of text books, reference books and other educational materials; 3. efforts student make to follow strictly teachers’ instruction and
textbooks; 4. school governing bodies’ valuing quality education as the mission of the school; and, 5. the school management’s focus on student achievement and discipline. The school’s parents-teachers’ joint committee and the school’s governing board make active involvement in planning, decision-making and evaluation of Chasa primary school activities, however, they have not yet made the issue of quality their major value. Members of the school governing bodies of the school under examination do not think that the school governing bodies have major roles in ensuring quality education. They consider quality issue as the duty and concern of educators only.

The governing bodies of the school under study are found to be shaky and not effective. Members of the school’s governing bodies lack thorough understanding of their roles and responsibilities. The conclusion that says existence of non-effective school governing bodies contributes to low quality education in the school under study matches with existing literature. As absence of “… clearly defined roles and responsibilities of governing bodies” (Balarin, Brammer, James, and McCormack, 2008); and “lack of common and shared vision” (Balarin et al., 2008) are features found to be the elements of non effective school governances. The school governing bodies of Chasa primary school need to regard quality education as the school’s mission.

Magnificent progress (student average mark has increased from 62 percent in the year 2009/10 to 70 in 2010/11, similarly, number failures decreased from 149 in the year 2009/10 to 78 in 2010/11) was noticed in the school under study in terms of achievement. The school governing bodies credited the school teachers, students and the principal for the contribution they made. Firstly, employment of the student-centered active learning approach and continuous assessment method in classroom instruction and also provision of supplementary classes by teachers; second, students improved discipline as well better individual and organized student effort; and thirdly, the school principal’s focus on test achievement, discipline and creation of suitable learning environment are believed by the school governing bodies to have effected these radiant progress.

From theoretical framework perspective the following conclusion can be drawn: Absence of sufficient policy dialogue at local level on education quality; absence of meaningful parental involvement in the teaching-learning process; lack of strong home support for learners; and absence of effective assessment system were
identified to be the four underlying process that seem to have negatively affected good quality education in Chasa primary school. Out of the five key underlying education quality process indicated by the framework, only one, that is, the existence of structured pedagogy and relevant curriculum is pertinent to Chasa primary school. Besides, the existence of some quality inputs like trained and experienced teachers and appropriate textbooks were found to be applicable to quality education at Chasa primary school. Except that it fails to give explanation about the contribution of students’ organized and guided effort by schools on quality, Edqual’s quality framework is found to be better in defining quality education by clearly showing critical inputs to provide, indicated the underlying key processes to ensure quality and also identified mechanisms to evaluate quality.

Thus, the social capability model, EdQual model, can be credited for shading light on the importance of considering home and community environment improvement in both rural and urban areas.

Reference


UN, (1950). The Declaration of Human Right, New York,

UN, (2000). Universal declaration of Millennium Development Goals,


Influence of Career Self-Efficacy Beliefs on Career Exploration Behaviours among TVET College Students in Wollega Zones Town

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Abstract

This study was to determine the extent to which influence of career self-efficacy beliefs on career exploration behaviour of college students. Correlational survey design was employed to investigate the relationships of career self-efficacy beliefs and career exploration behaviour among TVET college students. The 238 college students were participated and were selected using multistage sampling methods. Data was analyzed using Pearson correlation for career self-efficacy beliefs and career exploration behaviour, and regression analysis used to predicate influence of career self-efficacy on career exploration behaviour. Result of research indicated that career self-efficacy sources were positive influenced and statistically significantly correlated with career exploration behaviour ($r = .408$, $P<.01$). The career self-efficacy has positive and strong statistically significant association with past performances accomplishment of the college students ($r = .752$, $p< .01$). However, it was statistically significant and has weak relationship with career exploration behavior ($r = .214$, $p<.05$). Verbal persuasion is more significant association ($r = .555$, $p<.01$) to career exploration behaviours than other sources. Multiple liner Regressions analysis shows that, approximately 17% of variance in the career exploration behavior was significant prediction by career self-efficacy beliefs. In conclusion, career self-efficacy a belief is positively influenced career exploration behaviour among TVET college students.

Keyword: Career, Self-efficacy, Career Exploration, TVET

Introduction

Career exploration is to all of the activities that individuals engage in for the purpose of promoting career development, choice, or adjustment (Gore, Bobek, Robbines, and Shayne, 2006). Exploratory activities promotes an understanding of self and the environment that enables people to develop realistic career goals and plans (Sugalski and Greenhaus, 1986). Stumpf et al. (1983) developed a model of career...
exploration that involves three primary components: exploration process (e.g., where and how one explores), reactions to exploratory behaviours (e.g., affect and stress), and exploration beliefs (e.g., instrumentality and preference).

It is perceived however, that only through systematic and thorough career exploration can people adequately gather information that will help them make clear and successful career choices (Atkinson and Murrell, 1988). Nesdale and Pinter (2000) study that as opposed to not participating in these activities, when people seek employment through job training, preparing resumes, answering advertisements, and interviewing, it increases their probability of obtaining employment.

Additionally, Blustein (1997) believed that the motivation to explore careers is mostly intrinsic and develops from natural curiosity, self-determination, and desire. If an individual is not provided with the appropriate resources to be properly prepared, and does not receive specific reinforcements and encouragements, the task of career exploring can turn out to be quite unpleasant and ineffective. On the other hand, when individuals incorporate their own needs, wants, values, and aspirations in their career exploration, it enriches the career-learning experience (Atkinson and Murrell, 1988). Thus, people tend to explore careers in response to internal drives, but this motivation can be enhanced when the process becomes meaningful to them personally.

Similarly, Career exploration is the process of learning about yourself and the world of work, identifying and exploring potentially satisfying occupations, and developing an effective strategy to realize your goals (http://career.berkeley.edu/info/careerExp). Although Career exploration is a complex process individuals’ engage in to obtain and enhance self and environmental knowledge, interests, skill, and to ultimately attain career goals (Taveira and Moreno, 2003). It involves career-related behaviours such as talking to people about opportunities, learning about necessary abilities and skills, and acquiring education for advancement (Betz and Voyten, 1997).

However, Self-efficacy is an individual’s level of confidence in and beliefs about his/her capabilities to successfully carry out courses of action, perform given behaviours, accomplish given tasks, and attain desired performance outcomes (Bandura, 1997 and Betz and Taylor, 2001). Self-efficacy can ultimately determine
whether an individual will choose to perform or refrain from performing a task (Bandura, 1982). In fact, people's beliefs about their capabilities are often central to how they interact with the world (Sterrett, 1998). Self-efficacy is therefore an important factor in understanding how people develop confidence and perceive their abilities.

It is believed that self-efficacy beliefs influence how people feel, think, motivate them, and behave (Bandura, 1993). In Bandura's (1986) describes that self-efficacy as a cognitive structure created by the cumulative learning experiences in a person's life. These experiences can lead an individual to develop the belief or expectation that they can or cannot successfully perform a specific task or activity. People who have high self-efficacy are more likely to attempt and successfully execute tasks, whereas those with low self-efficacy find it difficult to achieve them because they are often fighting self doubt (Bandura, 1993 and 1997). Thus, both positive and negative self-efficacy beliefs have a big influence on what activities people choose to participate in.

Sources of Self-Efficacy
Bandura’s (1977 and 1982) self-efficacy theory proposed that self-efficacy beliefs are developed and increased primarily through four major processes and sources of information. These are (a) past performance accomplishments and successful mastery experiences, (b) vicarious learning experiences through observing the performance of role models and modelling them, (c) verbal persuasion such as social influences in response to one's abilities and encouragement from others, and (d) emotional arousal such as anxiety and other negative psychological states (Bandura, 1982).

Past Performance Accomplishments
Although self-efficacy is flexible, it usually comes from sources that are based primarily on past performance experiences (Lane, Jones, and Stevens, 2002). In fact, past performance accomplishments tend to be the most powerful and dependable predictors of self-efficacy beliefs (Bandura, 1977 and 1986; Dawes, Horan, and Hackett, 2000; Lane et al., 2002). Research evidence showed that high self-efficacy beliefs from experiences of success and mastery, and low self-efficacy based on poor experiences also generalize across different contexts and situations (Lane et al., 2002; Niles and Sowa, 1992 and Sterrett, 1998).
However, Brown (2002) explained that outcome expectations are personal beliefs about the consequences or outcomes of performing particular behaviours. Whereas self-efficacy beliefs are concerned with one’s capabilities (Can I do this?), outcome expectations involve the imagined consequences of performing given behaviours (If I do this, what will happen?). Outcome expectations include several types of beliefs about response outcomes, such as beliefs about extrinsic reinforcement (receiving tangible rewards for successful performance), self directed consequences (such as pride in oneself for mastering a challenging task), and outcomes derived from the process of performing a given activity (for instance, absorption in the task itself).

High self-efficacy expectations when faced with obstacles could lead an individual to persistence in response to a demanding educational program. Career decision self-efficacy influences individuals’ level of engagement in career exploration activities in that the greater the confidence an individual has in his or her decision-making abilities, the greater the likelihood he or she would actively participate in the career exploration process (Hackett, 1995).

**Verbal Persuasion**
According to Redmond (2010), self-efficacy is influenced by encouragement and discouragement pertaining to an individual’s performance or ability to perform, such as a manager telling an employee: “You can do it. I have confidence in you.” Using verbal persuasion in a positive light generally leads individuals to put forth more effort; therefore, they have a greater chance at succeeding. However, if the verbal persuasion is negative, such as a manager saying to the employee, “This is unacceptable! I thought you could handle this project” can lead to doubts about oneself resulting in lower chances of success. Also, the level of credibility directly influences the effectiveness of verbal persuasion; where there is more credibility, there will be a greater influence.

Guidance and positive suggestions from others can assist in correcting performance in areas needing improvement, which are producing unsuccessful results (Bandura, 1977).

**Emotional Arousal**
Emotional arousal is another source of information that can influence self-efficacy (Bandura, 1977). People often rely to some extent on their emotional reactions to situations or tasks to help determine if they can cope and be successful at it. High
negative emotional arousal often debilitates performance, whereas positive emotional arousal can raise performance. Negative emotional arousals are stressful reactions that often lead to fear, and cause people to doubt their competency (Bandura, 1977). Positive emotional arousals and anxiety towards a task can lead people to be more motivated to perform successfully and increase feelings of satisfaction from the task. It is essential therefore, that techniques to reduce negative and increase positive emotions be used to raise self-efficacy.

**Vicarious Learning**

Many self-efficacy beliefs are also developed by learning from other people’s experiences (Bandura, 1977). Observing others perform successfully can improve people’s beliefs in their own capabilities to perform in similar ways, and helps encourage persistence in their own efforts. People often compare themselves to others and become convinced that if someone else similar to them can do it, so can they (Bandura, 1977). The clearer the outcomes and the more determination expended in the face of obstacles by the model, the more likely the observer will be to model that behaviour in the future. Since observing others is not a direct reflection on how someone will do personally though, its effect can be weaker than the other sources.

Self-beliefs Bandura's (1986 and 1997) defined as people's judgments of their capabilities to produce designated levels of performance. According to the tenets of social cognitive theory, people are more likely to perform tasks they believe they are capable of accomplishing and less likely to engage in tasks about which they feel less competent.

Hackett and Betz (1981) state that Career self-efficacy on the other hand people's judgments of their abilities to perform career behaviours in relation to career development, choice, and adjustment (Anderson and Betz, 2001; Niles and Sowa, 1992). Career self-efficacy provides important information relevant to understanding the complex career development process (Niles and Sowa, 1992). Career self-efficacy beliefs can lead to avoidance of or motivation toward career behaviours (Betz and Taylor, 2001). Low career self-efficacy can cause people to procrastinate making career decisions, and may delay them from following through with a decision once it has been made (Betz, 1992). Even if a low career self-efficacy belief based on a realistic and accurate assessment of an individual's capabilities or experiences, it often leads to a lack of full awareness of his or her potential to
successfully peruse different careers (Betz and Hackett, 1981). On the other hand, those who have high career self-efficacy tend to visualize success for themselves and seek positive support and outcomes for their career ambitions (Bandura, 1993). In general, the higher the career self-efficacy, the greater the career goals and challenges people will set for themselves, and the stronger their commitment will be to them (Bandura, 1993 and 1997). As a result, low career self-efficacy beliefs should be challenged and improved, whereas high career self-efficacy should be supported and reinforced.

Dawes *et al.* (2000) and Van Ryn and Vinokur, (1992) studies have shown a significant relationship exists between career self-efficacy beliefs and career exploration activities. To date, no studies have focused specifically on the influence of career exploration process behaviours on the level of career certainty. However, in one study, Mako (1990) examined the relations among career exploration, career indecision, narcissism, and egocentrism. One of the central findings was that career certainty correlated positively with Environmental Exploration ($r = .18$), Self-Exploration ($r = .17$), and Internal Search Instrumentality ($r = .15$). Mako concluded that as the amount of certainty about a major or career decision increased, the amount of self and environmental exploration and beliefs in the value of self-examination and reflection also increased.

This study explored the sources of career self-efficacy beliefs and their influence on career exploration behaviors. The main research question asked whether a significant relationship exists between sources of career self-efficacy and career exploration, and looked at which of the four sources were related to higher career self-efficacy and more active career exploration. This research is important because it is beneficial to understand what motivates individuals to explore career opportunities. Furthermore, this research is based on the belief that possessing a high level of self-efficacy towards one’s career and job search ability increases the likelihood an individual would be more motivated to actively explore and achieve successful career outcomes. Studies on these constructs are an important contribution since there is a lack of research available on the relationship between the various sources of career self efficacy beliefs on career exploration behaviors.

Yet, career exploration behaviour is the major student’s job search problem that is under recognized as public burden. Therefore, the present study will assess career self-efficacy belief and career exploration behaviour Technical and Vocational
education training college (TVET) in three zones namely (College in Nekemte, West Wollega and Horo Guduru Zones Town).

**Statement of the Problem**

Self-efficacy beliefs inform not only the range of occupations individuals perceive as viable career options, but influence the level of persistence and success that individuals have in their chosen career fields (Hackett and Betz, 1981).

It is high school students begin formalizing and identifying their occupational preferences while making preliminary decisions about their career choice (Duggan and Jurgens, 2007; Tang, Pan, and Newmeyer, 2008). However, low-income college students in urban areas are often faced with many challenges, including a lack of exposure to a broad range of possible occupational choices and limited access to working role models (Austin, 2010; Fouad, Kantamneni, Smothers, Chen, Fitspatrick, and Terry, 2008; Gushue and Whiston, 2006). These barriers can lead to the belief that academic effort and achievement will not pay off, thus, adversely impacting the career selection process (Constantine, Wallace, and Kindaichi, 2005; Jackson *et al.*, 2006).

For the most part, research on career development of TVET students has focused on a relatively narrow range of career development topics. The focus of most studies can be categorized primarily into the areas of career choice (Esters and Bowen, 2005; Jones and Larke, 2001; Scofield; 1994), career perceptions (Hoover and Houser, 1991; Thompson and Russell, 1993; White, Stewart, and Linhardt, 1991), career decision making (Kotrlik and Harrison, 1989), and College choices (Conrad *et al.*, 2004).

However, there has been no research focused on antecedents of career choice, such as career exploration throughout the career development process (Blustein and Phillips, 1988; Sugalski and Greenhouse, 1986). Moreover, because career decision is the degree of certainty about individual's career choices (Osipow et al 1976), it would seem logical that an investigation into the level of career certainty would be necessary to better understand the career choices process. This paper will review the topics of self-efficacy beliefs, the four sources of self-efficacy, career self-efficacy, career exploration, and counseling applications. Given that there has been no research conducted on the influence of career self-efficacy on career exploration behaviour among TVET college students, the present study was
conducted to address this void by exploration these constructs with a group of postsecondary school students. Because lack of organized information, lack of vicarious self-efficacy, lack modeling, difficult job search, create jobs, awareness of students, very limited career search area career exploration behaviours in Ethiopia. Thus, the general objective of the study is to assess career self-efficacy influences on career exploration behaviour among TVET college students in three-Wollega zones town.

Methodology
Research Design
Correlational survey design was employed to investigate the relationships career self-efficacy beliefs and career exploration behaviour among college students.

Population and sampling Techniques
Population of the study was consisted of 2800; among this, the researchers selected 238 samples of TVET college students. The study was applied multi-stage sampling procedure since there are diversified respondents in terms of location/residence and grade levels. The researchers used purposive sampling techniques to select study area and grade levels II to IV. The researchers used stratified sampling methods to selected departments. Finally, the researchers used systematic random sampling methods for selection of students.

Instrument Data Collection
The survey consisted of three measures constructed to assess close-ended questionnaires; demographic, sources of career self-efficacy belief, and career exploration behaviour. First, Questionnaire was used to collect demographic data. Secondly, to measure the sources of career self-efficacy beliefs, the Career Self-Efficacy Sources Likert Scale were adapted Nasta, (2007). The third, measure career exploration behaviour a revised version of the Career Exploration Survey-Revised (Stumpf et al., 1983) consists of 28 items. Responses were scored on an interval Likert-type scale.

Procedure Data Collection
The procedure of data collection was started by writing official letter from Wollega University and getting the consent of the TVET colleges, the researchers dealt with respondents. Second, based on the arrangement made, the researchers contacted the students with the teachers of the college and the researchers explained the
objectives of the study for the students and assured them about the confidentiality of their responses. After students finished questionnaires, the researchers were collected.

**Data Analysis**

After the necessary data was collected and coded, statistical data was computed using the Statistical Package for Social Sciences (SPSS), version 20. Statistical methods including descriptive statistics, Pearson correlation, Regression, and variances were used in the analysis. Descriptive statistics was used for the analysis of the basic demographics and survey items of the questionnaire; Pearson correlation was computed to determine the association of the variables of the study (sources of career self-efficacy and career exploration behaviour). Finally, multiple Regression analysis was used to test which source has the strongest influences.

**Results and Discussion**

In this part, the results of the study are present in tables and with statistical descriptions, which show statistically significances and non-significant relations among the variables.

**Demographics Characteristics**

Table 1: Characteristic of the Participants (N = 238)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Male</td>
<td>113</td>
<td>47.48</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>125</td>
<td>52.52</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>238</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td>Age</td>
<td>16-21</td>
<td>184</td>
<td>77.31</td>
</tr>
<tr>
<td></td>
<td>22-30</td>
<td>54</td>
<td>22.69</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>238</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td>Level of Year</td>
<td>Level II</td>
<td>82</td>
<td>34.45</td>
</tr>
<tr>
<td></td>
<td>Level III</td>
<td>79</td>
<td>33.19</td>
</tr>
<tr>
<td></td>
<td>Level IV</td>
<td>77</td>
<td>32.35</td>
</tr>
</tbody>
</table>
Results Obtained using Descriptive Statistics

Table 2: Means and Standard Deviations of Career Self-Efficacy Sources Scale, and Career Exploration Behaviours (N=238).

<table>
<thead>
<tr>
<th>Scale Responses</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vicarious Learning</td>
<td>12</td>
<td>3.89</td>
</tr>
<tr>
<td>Verbal Persuasion</td>
<td>11.98</td>
<td>3.96</td>
</tr>
<tr>
<td>Emotional Arousal Positive</td>
<td>10.56</td>
<td>2.76</td>
</tr>
<tr>
<td>Emotional Arousal Negative</td>
<td>10.39</td>
<td>2.66</td>
</tr>
<tr>
<td>Performance Accomplishments</td>
<td>10.53</td>
<td>2.88</td>
</tr>
<tr>
<td>Career Self-Efficacy</td>
<td>55.46</td>
<td>9.39</td>
</tr>
<tr>
<td>Career Exploration</td>
<td>86.33</td>
<td>22.31</td>
</tr>
</tbody>
</table>

Relationship between Sources of Career Self-Efficacy and Career Exploration behaviour

Table 3 shows that, career self-efficacy was statistically significantly correlated with career exploration behaviours ($r= .408, p<.01$). This relationship shows that, career self-efficacy beliefs moderately and positively correlated with career exploration behaviour. Moreover, high career self-efficacy beliefs of TVET college students were more exploring career behaviour.

The sources of career self-efficacy beliefs were positively correlated with career exploration behaviour; i.e. Vicarious learning ($r = .383, p <.01$), verbal persuasion ($r = .555, p <.01$), emotional arousal positive ($r = .371, p <.01$), emotional arousal negative ($r = -.349, p < .01$) and performance accomplishments ($r = .214, p <.05$).

Relationship between Sources of Career Self-efficacy and Self-efficacy

Table 3 shows that, Pearson correlation between the sources of career self-efficacy and self-efficacy. Accordingly, career self-efficacy has significant relationship with vicarious learning ($r= .351, p<0.01$), verbal persuasion ($r=.360, p<.01$), emotional arousal positive ($r=.585, p<0.01$), emotional arousal negatively correlated ($r=.618, P<.01$), and Past performance accomplishment was strong and positively correlated with career self-efficacy ($r=.752, p<.01$). On the other hand, vicarious learning was statistically significantly correlated with verbal persuasion ($r= .579, p<.01$) and performance accomplishments was significantly correlated with emotional arousal positive ($r=.308, p<0.01$), but emotional arousal negative has weak relationship with vicarious learning ($r=.221, p<0.05$).
Generally, from sources of career self-efficacy beliefs past performance accomplishment was highly correlated with self-efficacy ($r=0.752$, $p<0.01$). This shows that, past performance accomplishment has positive contribution for achievement, but may not necessarily predict career exploration behaviour. Specifically, an individual’s achievement/self-confidence might be considered as feedback but not necessarily determinants for career exploration behaviour. In addition, verbal persuasion and Vicarious learning has also significant relationship with career exploration behaviour than other sources of career self-efficacy; ($r=0.555**p<0.01$, $r=0.383**p<0.01$) respectively.

**Table 3**: Pearson Correlations between Career Self-Efficacy, Career Exploration, and Sources of Career Self-Efficacy. (N= 238)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Career Self-Efficacy</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Career Exploration</td>
<td>.408**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Vicarious Learning</td>
<td>.351**</td>
<td>.383**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Verbal Persuasion</td>
<td>.360**</td>
<td>.555**</td>
<td>.579**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Emotional Arousal Positive</td>
<td>.585**</td>
<td>.371**</td>
<td>.046</td>
<td>-.019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Emotional Arousal Negative</td>
<td>.618*</td>
<td>.349**</td>
<td>.221*</td>
<td>.334**</td>
<td>.135</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Performance Accomplishments</td>
<td>.752**</td>
<td>.214*</td>
<td>.022</td>
<td>.144*</td>
<td>.391**</td>
<td>.338**</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.01 level (2tailed) and **Correlation is significant at the 0.05 level (2tailed)

Regarding Multiple liner regression analysis, career self-efficacy was significantly and positively related to career exploration behaviour, $F (4,841) = 20.029$, $p<.05$. The multiple liner regression coefficient was .408, indicating that approximately 17% of variance of career exploration behaviour for this sample were accounted for by the linear combination of the career self-efficacy. Regression illustrated that, the career self-efficacy beliefs and career exploration behaviour scales had significant positive regression weight, indicating students with higher career self-efficacy on these scales were expected to have higher career exploration behaviour.

**Table 4**: Summary Table of Multiple Leaner Regression Analysis for Sources of Career Self-Efficacy Variables and Career Self-Efficacy in Predicting Career Exploration (N=238)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Std. error</th>
<th>Beta</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career self-efficacy</td>
<td>.677</td>
<td>.151</td>
<td>.408*</td>
<td>4.475</td>
</tr>
<tr>
<td><strong>Vicarious Learning</strong></td>
<td>.451</td>
<td>.498</td>
<td>.092</td>
<td>.906</td>
</tr>
<tr>
<td>Verbal Persuasion</td>
<td>.751</td>
<td>.560</td>
<td>.502*</td>
<td>.914</td>
</tr>
<tr>
<td><strong>Emotional arousal positive</strong></td>
<td>.482</td>
<td>.199</td>
<td>.379*</td>
<td>.571</td>
</tr>
<tr>
<td>Emotional arousal Negative</td>
<td>.409</td>
<td>.258</td>
<td>.126</td>
<td>.584</td>
</tr>
<tr>
<td><strong>Performance Accomplishment</strong></td>
<td>-.407</td>
<td>.445</td>
<td>-.081</td>
<td>-.914</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed)
Career Exploration Vs Sources of Career Self-efficacy

To examine whether the sources of career self-efficacy explained variances occur career self-efficacy, a multiple linear regression analysis was performed. The predictor variables were the five sources of career self-efficacy and the criteria variable was career exploration.

As can be seen in Variance, indicated that regression models career exploration on the sources career self-efficacy significantly predicting verbal persuasion $F(4, 553) = 22.646, p<.05$ of variance accounted 30% and Emotional arousal positive $F(4, 414) = 27.436, P<.05$ in which 39.5% of the variance accounted in career exploration behaviour. On the other hand, vicarious learning and emotional arousal negative was not significant and influences in career exploration behaviour. Past Performance accomplishment were not found to be significant $F (2, 754) = 17.356, p<.05$. It seems that previous performance accomplishment did not have an impact on the overall relationship between career self-efficacy.

A Multiple regression analysis results indicated that, verbal persuasion and emotional arousal positive were more significantly predicting relation to career exploration behaviour. Nevertheless, performance accomplishment was not predicting variable, but positive correlated with career exploration behaviour.

Discussion

The aims of this descriptive survey were to assess the influence of the sources of career self-efficacy beliefs on career exploration behaviours. The current studies indicate that the career self-efficacy beliefs were moderate and positive influence on career exploration behaviours ($r = .408, p<0.01$) $F (4, 841) = 20.029, p < .01$, in which approximately 17% of variance (in table 4). Past research is consistently support to regressing career self-efficacy on the sources revealed that overall the model significantly predicted career self-efficacy, $F (1, 257) = 56.75, p < .001$, in which 18% of variance (Nasta, 2007). Career self-efficacy was account for by the source Career self-efficacy has also been found to be one of the best predictors of many beginning career behaviours, such as job searching (Niles and Sowa, 1992). In addition, research has found that career self-efficacy beliefs do indeed have a strong influence on career exploration and employment outcomes. Similarly, According to Sterrett (1998) and Van Ryn and Vinokur (1992) just the basic career self-efficacy belief that one can successfully search for a job is needed for initiating
the job search, obtaining employment, enduring rejection, and staying with a job once it is obtained. The higher an individual’s level of career self-efficacy, the more job search behaviours and positive employment outcomes will occur. In more recent research, Dawes et al., (2000) found that low career self-efficacy on the other hand can limit career exploration and development. Past studies support then, that career self-efficacy beliefs can in fact influence career exploration behaviours.

Regarding, the relationship between career self-efficacy and career exploration behaviour, result of current research show that career self-efficacy and the sources of career self-efficacy beliefs significant correlated with and predict career exploration. These results are consistent with past research, which has also shown that a significant relationship exists between career self-efficacy and career exploration activities (Betz and Voyten, 1997; Blustein, 1989; Dawes et al., 2000; Foltz and Luzzo, 1998; Van Ryn and Vinokur, 1992).

**Relationship between Sources of Career Self-efficacy and Career Exploration Behaviours**

The source of career self-efficacy were significant correlated with career exploration behaviour, Vicarious learning ($r = .383, p < .01$) in table 3 predicting values is 13.8 percent of variance in career exploration behaviour (in table 3). Past studies analogous with (Bandura, 1977), as a result, it is beneficial for people to observe the successes of others to help enhance their confidence in their own abilities to succeed. The clearer the outcomes and the more determination expended in the face of obstacles by the model, the more likely the observer will be to model that behaviour in the future. In addition to, verbal persuasion associated with career exploration behaviour is significant ($r = .555, p < .01$) in which 30 % of variance (in table 3). Many studies show that, Guidance and positive suggestions from others can assist in correcting performance in areas needing improvement, which are producing unsuccessful results (Bandura, 1977). This encouragement however, can be less influential than an individual’s own accomplishment experiences, since it is not based on authentic personal experiences. As a result, it is important that people utilize verbal support and encouragement from others, to be motivated to create new opportunities to observe their own success.

Regarding, emotional arousal positive significantly correlated with career exploration behaviours ($r = .371, p < .01$) indicted that approximately 44 percent of variance and emotional arousal negative ($r = -.349, p<.01$) in which 44.8% of
variance account in career exploration behaviour (in Table 3). Past research 
consistence with emotional arousal is another source of information that can 
influence self-efficacy. People often rely to some extent on their emotional reactions 
to situations or tasks to help determine if they can cope and be successful at it 
(Bandura, 1977). High negative emotional arousal often debilitates performance, 
whereas positive emotional arousal can raise performance (Bandura, 1977). 
Negative emotional arousals are stressful reactions that often lead to fear, and 
cause people to doubt their competency (Bandura, 1977). Positive emotional 
arousals and anxiety towards a task can lead people to be more motivated to 
perform successfully and increase feelings of satisfaction from the task. It is 
essential therefore, that techniques to reduce negative and increase positive 
emotions be use to raise self-efficacy.

Furthermore, statistical significant relationship past performance accomplishments 
and career exploration behaviour, but weak correlate (r = .214, p < .05) which 
means Most TVET college students are lack of career exploration behaviours 
previously. Previous research inconsistence association with past performance 
accomplishments tend to be the most powerful and dependable predictors of self-
efficacy beliefs (Bandura, 1977, 1986; Dawes, Horan, and Hackett, 2000; Lane et 
al., 2002). Research evidence showed that high self-efficacy beliefs from 
experiences of success and mastery, (Lane et al., 2002; Niles and Sowa, 1992; 
Sterrett, 1998).

**Conclusions and Recommendation**

**Conclusions**

Based on the major findings of the study, the following conclusions were drawn,

- The result of this study shows that, the Career self-efficacy beliefs were positive 
  and has statistically significant correlation with career exploration behaviour. 
  Similarly, there were the verbal persuasion and emotional arousal positive 
  which can positively influence on exploring career.

- Career self-efficacy beliefs have positive influence on career exploration 
  behaviour among TVET college students. This shows that, College students 
  have been previous experience, motivation/encouragement, modeling them 
  toward career opportunities is highly increased to develop career choice, career 
  development, career adjustment, etc.

- It is also important that college students be assist in understanding and 
  improving their career self-efficacy beliefs, and in effectively exploring
compatible career options to help them in the complex process of career development, planning, and preparation.

✓ Verbal persuasion of career self-efficacy is strong and influences the individual’s career exploration. This means, increasing encouragement, motivation, credibility, Guidance and positive suggestion will be increased task performance and exploration of career.

✓ From sources of career self-efficacy beliefs past performance accomplishment was highly correlated with self-efficacy (r=.752, p<0.01).

✓ In addition, verbal persuasion and Vicarious learning has also significant relationship with career exploration behaviour than other sources of career self-efficacy; (r=.555**p<.01, r= .383**,p<.01) respectively.

**Recommendation**
Based on the major findings of the study, the following recommended were forwarded,

✓ There are no counseling services in those selected TVET Colleges, where as they need special career choice, career exploration, career development, guidance and counseling services early. Thus, TVET Colleges should have to assign professional Counselors on each of TVET Colleges in collaboration with Oromia Education Bureau/Zonal Education Bureau.

✓ Ministry of Education/Oromia Education Bureau/Zonal Education Bureau need to establish the career centre which can provide the students about career information, career exploration, career choice, career adjustment, and searching jobs.

✓ The study suggest that, future research is needed on the influence of the sources of career self-efficacy on job seeking among culturally diverse populations and different age groups.

**References**


Practices and Challenges of Teaching-Learning of the Practical Parts of Science in Preparatory Schools in Wollega

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College of Education and Behavioral Science, Wollega University, P.O.Box: 395, Nekemte, Ethiopia

Abstract
This study was intended to examine the practices and challenges of teaching-learning of the practical parts of science subjects in preparatory schools in Wollega zones. Probability sampling method was used for sample selection and questionnaire, interview and observation were the instruments used for data collection. Quantitative and qualitative methods of data analysis were employed for analyzing and interpreting data. Plasma-TV Simulations and Teacher's laboratory demonstrations were the methods frequently used in preparatory schools in the study area. Students conducting practical activities themselves (being in group or individually) is none existent. Imported/industrial laboratory materials are widely utilized than the local products. Lack of facilities, lack of resources (both human and material) and skill gap are among the bottle neck challenges of the preparatory schools to use laboratory in the teaching-learning of science practical parts. To this end, updating and upgrading short and long-term trainings and provision of support by different stakeholders were strongly recommended in order to facilitate the teaching-learning of the practical parts of science subjects in preparatory schools.

Introduction
Provision of quality education is one of the major concerns of the country's educational goals as indicated in the new education and training policy of Ethiopia. One of the critical issues with regard to the teaching-learning of science subjects is the methods and techniques employed for class room instruction.

The new Education and Training policy of Ethiopia targets at improving educational access, quality, equity, efficiency and relevance, as these were the major educational problems of the country before 1994 (EETP, 1994). As stated in the policy, objectives of the secondary school curriculum focus at enabling students to solve real life problems and to be creative and productive citizens (EETP, 1994). Subsequently, to achieve these learning objectives the role of educational materials and facilities and the using of desirable approaches, strategies and methods are indispensible. As stated in the education policy, in order to ensure quality
education, there have to be adequate workshop and laboratory materials, especially in secondary schools and vocational institutions (MoE, 2002).

More often than not, the intended learning outcomes could be achieved when methods that improve active engagement of learners in the process of teaching-learning are employed. Different scholars put forward the importance of using methods which encourage students’ engagement in the process of teaching-learning. For instance, Firdissa (2005) stated that, when students’ involvement in the educational process is enhanced, the students will be able to recognize and accept responsibility for learning and development. One of the possible strategies that may help students to realize this practice is their using of different methods of active learning approaches in the actual processes of teaching-learning.

Active learning methods allow students to engage in the process of teaching and learning; and these engagements help the learners to acquire the necessary knowledge and skills easily and retain or consolidate permanently what they learned. According to Spryer (2002), active learning constitutes the collection of instructional strategies that make students do most of the works which help them to construct their own knowledge, skill and to bring attitudinal changes.

Practical work is one of the active learning methods required widely to be used in the teaching-learning of science. Different scholars have suggested that practical work is more important for teaching science and other subjects as it allows students to use more of their senses. According to LeMarechal and Tiberghie (2001), practical work includes all teaching and learning activities in science that involve learners at some point in handling or observing the objects or materials they are researching. Therefore, practical work is indispensable for teaching science; and it should not be missed as scholars of the field suggest. For example, as stated by Mittal (2004) activities and experiments are tremendous assets to science lessons. This statement stresses not only the importance of activities and experiments for teaching science but also how much they are crucial to acquire the required learning objectives of science lessons. On the other hand, Nayak and Roa (2004) suggested what could be happened when students are not allowed to learn science by doing themselves.

…students cannot learn to think critically, analyze information, communicate scientific ideas, make logical arguments, work as part of a team, and acquire
other desirable skills unless they are permitted and encouraged to do those things over and over in many contexts.

Thus, learning by doing or practical activity is considered as a requirement for science lessons as such methods enable the learners to think critically, analyze information, and communicate scientific ideas as recommended by scholars.

**Theoretical Frameworks of the Study: Constructivist Theory of Learning**

Constructivism is the most important theory of learning that plays prominent role in the process of teaching and learning in general and that of science education in particular. Slavin (2006:243) pointed out that constructivist theory sees learners as constantly checking new information against old rules and then revising rules when they no longer work. This view has profound implications for teaching, as it suggests a far more active role for students in their own learning than is typical in many classroom.

The Constructivists believe as indicated by Jonasson (1991 cited in Mergle, 1998 [Online]) is that “learners construct their own reality or at least interpret it, based upon their perceptions of experiences; and an individual’s knowledge is a function of one’s prior experiences, mental structures, and beliefs that are used to interpret objects and events.”

According to constructivist view of learning, students must construct knowledge in their own minds and the teacher's role is to facilitate this process by teaching in ways that make information meaningful and relevant to students (Waxman, Padron, & Arnold, 2001 cited in Slavin, 2006:243). In other words, teacher should provide students opportunities to discover or apply ideas themselves, and by teaching students to be aware of and consciously use their own strategies for learning. In general, this theory stresses the significance of learners’ active involvement in the process of teaching and learning so as to make learning easy and to enable them to construct their knowledge.

**Conceptual Frameworks: Scientific Literacy**

Scientific literacy is the term that has had so many interpretations that it is now means virtually everything to do with science education; and that it had come to be an umbrella concept to signify comprehensiveness in the purposes of science teaching in schools (Roberts, 1983: 29). According to Roberts the term looked more
like a slogan used by scientists and science educators to elicit support for teaching science in schools. Hence, scientific literacy has become a key concept in thinking about science education; and its promotion as the goal of science teaching, has found its way in curricula worldwide (Harlen, 2000:11). Boujaoude, 2002 cited in Yuenyong and Narjaikaew, 2009:336) also defined scientific literacy in terms of a framework consisting of four aspects. These are (1) the knowledge of science, (2) the investigative nature of science, (3) science as a way of thinking, and (4) interaction of science, technology and society.

Hurd (1998 cited Yuenyong and Narjaikaew, 2009:336) defined scientific literacy based on the seven dimensions of a scientifically-literate person. As he suggested a scientifically-literate person expected to: (1) Understand the nature of scientific knowledge; (2) Apply appropriate science concepts, principles, laws, and theories in interacting with his universe; (3) Use the process of science in solving problems, making decisions, and furthering his own understanding of the universe; (4) Interact with values that underlie science; (5) Understand and appreciate the joint enterprises of science and technology and the interrelationship of these with each and with other aspects of society; (6) Extend science education throughout his or her life; (7) Develop numerous manipulative skills associated with science and technology.”

Methods of Teaching
The methods of teaching can be defined as the manner in which teachers impart knowledge and skill in the process of teaching and learning. Thus, method implies the teaching-learning process involving both teaching and learning activities. Gage defines teaching methods as cited in Mohan (2007) as “Patterns of teacher behaviors those are recurring, applicable to various subject matters, characteristic of more than one teacher, and relevant to learning.”

There are several types of methods of teaching used for the purpose of teaching and learning both in schools and out of schools. Current literatures show the various methods can be used under different circumstances depending on the nature of the subject matter, objectives of the lesson, the interests, capacity and understanding level of the learners, and etc. (ICDR, 1999).

The teaching methods can be generally classified into traditional (teacher-centered) and progressive or constructivist (learner-centered) methods depending on the
involvement of the students in the process of teaching and learning (Aggarwal, 2005:85). In the traditional methods, direct instruction takes place (Borich, 2007:258); and such methods are more suitable for the teaching of facts, rules, action sequences, etc. Constructive methods or indirect instructions are best employed for teaching concepts, skills, inquiry, and problem solving.

**Statement of the Problem**

In spite of the importance of laboratories, workshops and other methods required to teach the practical parts of the science subjects effectively, several research findings show that the practices of schools in using these methods is unsatisfactory due to different reasons.

In many countries of the world, science education is suffering from a scarcity of appropriate facilities and supporting materials, including the equipment (World Bank, 1993). The World Bank research document further explained that the experiences from many developing countries demonstrate that the quality of science education is often unsatisfactory due to not only the low supply of equipments but also due to local conditions/climatic conditions in many tropical countries (high temperature and humidity) which affect some of the materials to get corrode very fast. Over such tropical areas the supply of the most valuable facilities such as water, electricity and gas are often nonexistent. To improve these situations, many national, regional and international projects have been launched, although, their success was in many cases far below the expected.

The inadequate use of these methods for teaching the practical parts of science (i.e. the using of laboratory, workshops and others) in the secondary schools in Ethiopia was revealed by the studies conducted so far. However, the problem is still escalating than ever this day in the secondary schools in Wollega particularly in the preparatory schools where students are required to acquire necessary skills and more practical experiences.

Thus, this study is targeted at investigating the issue in detail to determine the level of using the required methods and to identify the factors that hinder the preparatory schools from using the methods and ultimately to come up with possible solutions that may help to minimize the challenges if not to avoid them. The general objective of this study is to investigate the methods used to teach practical part of science
subjects and to know the major challenges in using appropriate methods in upper secondary (preparatory) schools in Wollega.

**The Research Design and Methodology**

**The Research Design**

To achieve the intended objective, mixed method that is both quantitative and qualitative research method was used concurrently as this approach is concerned with explaining the actual experience of the schools. This mixed-approach is also chosen with the notion that any inherent weaknesses of the quantitative method would be offset by the qualitative method and vice versa. Thus, in this study, although both quantitative and qualitative methods are used concurrently, the qualitative part had the larger portion as deep interviews and closed observations were used to gather the required information.

**Sources Data**

The sources of data for this study were preparatory school students, preparatory school science (Biology, Chemistry and Physics) teachers, and science subjects department heads of the schools. Moreover, the preparatory schools science laboratories.

**Samples and Sampling Techniques**

In this study, samples were selected from the identified population (source of data), using different probability and non-probability sampling techniques. As presented in (section 1.7), this study is delimited to public (government) preparatory schools in the four zones of Wollega (i.e. East Wollega zone, Horoguduru Wollega zone, West Wollega zone and Kelem Wollega zone). Then, two secondary schools were selected from each of the four zones using random sampling method. Accordingly, eight schools were chosen for this study.

To get information from the side of the students, 25 percent of the science stream (grade 11 & 12) students from each of the schools were selected randomly to allow them take part in the study. Accordingly, 400 students were chosen from the eight schools selected for the study. Moreover, 50 percent of the three science subjects (Biology, Chemistry and Physics) teachers who were teaching grade 11 and/or 12 were selected randomly for the study. Furthermore, the department heads of the three science subjects were selected by available sampling technique. Thus, 48 science teachers and twenty four department heads were selected for the study.
Data Gathering Instruments
The data gathering instruments used in this study were questionnaires, interview and observation. In this study, the combination of open-ended and close-ended questionnaires was used to collect data. The first set of questionnaire was used to collect data from preparatory school students and the second set of the questionnaire was used to collect data from preparatory school science subjects (Biology, Chemistry and Physics) teachers. Both sets of the questionnaires have similar structures in possessing two parts. The researcher also used semi-structured interview to gather information from preparatory school science subjects (Biology, Chemistry and Physics) department heads in this study.

Methods of Data Analysis
Data analysis is a means of organizing and cross-examining data in ways that allow researchers to see patterns, identify themes, discover relationships, develop explanations, make interpretations, and generate theories (Hatch, 2002: 148). According to De Vos (1998:85) data analysis entails the breaking down of data into constituent parts to obtain answers to research questions and to test hypothesis.

As the study employed mixed-method research design, both quantitative and qualitative data analysis methods were used in order to answer the research questions. Creswell and Plano (2007: 128), noted that data analysis in mixed-methods research consists of analyzing the quantitative data using quantitative methods and the qualitative data using qualitative methods. In this study, the quantitative data, the data collected using questionnaire, from the secondary schools students and the science subjects teachers was analyzed using the descriptive statistical methods; mainly frequency counts, percentages and mean values were used and presented using tables. In this study, the qualitative data, the data gathered by interview and observation was analyzed using the different qualitative data analysis techniques.

Results and Discussion
The Status of Science Laboratory in Preparatory Schools
Laboratory method is among the methods commonly used for the teaching-learning processes of science practical parts. These methods have significant pedagogical advantages as advocated by different scholars. For instance, Hofstein and Lunetta (2003:42) explained the position of these methods in the teaching-learning of science practical parts as follows.
Laboratory activities are designed to engage students directly with materials and phenomena, simulations can be designed to provide meaningful representations of inquiry experiences that are often not possible with real materials in many science topics. In such cases, simulations engage students in investigations that are too long or too slow, too dangerous, too expensive, or too time or material consuming to conduct in school laboratories.

However, some of the schools under study have no laboratory for the three science subjects. Some of the schools use plasma-TV instead of laboratory. Still some of them do not have both the plasma-TV and laboratories. The secondary schools’ possessions of Plasma TV and laboratory are summarized in table 4.1 as follows.

Table 1: Plasma-TV and Laboratory Possessions of selected Preparatory schools

<table>
<thead>
<tr>
<th>No</th>
<th>School Name</th>
<th>Service</th>
<th>Subject Area</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Biol.</td>
<td>Chem.</td>
</tr>
<tr>
<td>1</td>
<td>S1</td>
<td>PTVP</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Laboratory</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2</td>
<td>S2</td>
<td>PTVP</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Laboratory</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3</td>
<td>S3</td>
<td>PTVP</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Laboratory</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4</td>
<td>S4</td>
<td>PTVP</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Laboratory</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>5</td>
<td>S5</td>
<td>PTVP</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Laboratory</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>6</td>
<td>S6</td>
<td>PTVP</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Laboratory</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>7</td>
<td>S7</td>
<td>PTVP</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Laboratory</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>8</td>
<td>S8</td>
<td>PTVP</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Laboratory</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Source: Data gathered from the schools in 2015 (key: √=exist, X=not exist)

Table 1 presents that only 12.5 percent of the schools has both plasma-TV program and laboratory for the three science subjects; 25 percent of them have plasma-TV program; 50.0 percent of them have laboratory and 37.5 percent of the schools have no both Plasma-TV Program and Laboratory. As indicated in table 4.1, only 50 percent of the schools under study have functional science laboratories. Although, 50 percent of the schools have laboratories, status or quality of the services they are rendering is another important issue that requires due attention. On the other hand, only 25 percent of the schools have functional Plasma-TV program. This is another trivial challenge of the schools under study.

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In general, the lack of plasma-TV program and laboratory in most of the schools under study is the bottle neck challenge for the teaching-learning of science practical parts as such situations usually force the schools to teach all the science subjects contents theoretically.

Methods/Techniques Used for the Teaching-Learning of Science Subjects Practical Parts

To make the science knowledge and skills easy to understand and consolidate permanently, different methods and techniques are suggested by different scholars. Laboratory method in which students conduct activities and experiments individually or in group is one of such techniques. Teacher's demonstration is the other method employed when the teacher shows some activities doing her/him self in laboratory, in workshop or on field. Simulation method (Computer/Plasma-TV simulations) can be also used to show activities in an artificial environment. These different methods/techniques have their own unique advantages and disadvantages. Moreover, there are circumstances under which each of these methods/techniques serve effectively.

Examining the practices of the preparatory schools under study using of the above methods/techniques in the teaching-learning of practical parts of the science subjects was one of the intentions of this study. Accordingly, the responses of the students and teachers regarding these practices are depicted in table 2a, b and c.

<p>| Table 2a: Methods/techniques used for teaching Biology Practical Parts |
|---|---|---|---|---|---|</p>
<table>
<thead>
<tr>
<th>No</th>
<th>Methods/Techniques</th>
<th>Respondents</th>
<th>Never (1)</th>
<th>Rarely (2)</th>
<th>Sometimes (3)</th>
<th>Usually (4)</th>
<th>Always (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Plasma-TV simulation</td>
<td>Students</td>
<td>35.1</td>
<td>16.8</td>
<td>31.9</td>
<td>13.6</td>
<td>2.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
<td>56.3</td>
<td>12.5</td>
<td>25.0</td>
<td>6.3</td>
<td>0.0</td>
</tr>
<tr>
<td>2</td>
<td>Teacher's laboratory demonstration</td>
<td>Students</td>
<td>46.6</td>
<td>34.0</td>
<td>14.7</td>
<td>3.7</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
<td>37.5</td>
<td>12.5</td>
<td>43.8</td>
<td>6.3</td>
<td>0.0</td>
</tr>
<tr>
<td>3</td>
<td>Students' conducting PA in group in laboratory</td>
<td>Students</td>
<td>90.1</td>
<td>8.4</td>
<td>1.0</td>
<td>0.5</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
<td>43.8</td>
<td>37.5</td>
<td>12.5</td>
<td>6.3</td>
<td>0.0</td>
</tr>
<tr>
<td>4</td>
<td>Students' conducting PA individually in laboratory</td>
<td>Students</td>
<td>96.3</td>
<td>2.1</td>
<td>1.0</td>
<td>0.5</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
<td>81.3</td>
<td>12.5</td>
<td>6.3</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>5</td>
<td>Students' conducting PA in workshops</td>
<td>Students</td>
<td>96.3</td>
<td>3.7</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
<td>93.8</td>
<td>6.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>6</td>
<td>Students' conducting PA on fields</td>
<td>Students</td>
<td>84.8</td>
<td>9.9</td>
<td>4.7</td>
<td>0.5</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
<td>50.0</td>
<td>37.5</td>
<td>12.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Majority of the students (64.9%) indicated their schools have been using Plasma-TV simulations for the teaching-learning of biology practical parts. But, majority (56.3%) of the teachers revealed their never using Plasma-TV simulations for teaching biology practical parts (see table 2a). in line with this, as indicated in table 4.1, 87.5% of the schools under study have no functional Plasma-TV program as of the period of data collection for this study. Since very large proportion (87.5%) of the schools have no functional Plasma-TV program, it is logical to conclude that the usage of Plasma-TV simulations for teaching-learning purposes including that of biology practical parts is very limited.

The result of interview with biology department heads also strengthens this limited usage of Plasma-TV simulations for the teaching-learning of biology in most of the schools under study. Using teacher’s laboratory demonstration for the teaching-learning of biology practical parts was recognized by 53.4% of the students and 62.5% of the teachers (see table 2a). Moreover, the interviewed department heads of biology revealed the relatively wide usage of teachers’ laboratory demonstration in most of the schools under study by indicating some of the reasons for which the method preferred over the others.

For instance, department head of biology in school (S5) mentioned the degree to which they were using demonstration method indicating the rationale behind it as follows:

*I and my department teachers commonly use demonstration method for teaching biology practical parts. One of the reasons for our using demonstration method frequently is the shortage of chemicals in my school biology laboratory; and hence, this situation forced us to widely rely on this method when we go to laboratory to teach practical activities.*

Other biology department head from school (S8) mentioned the reasons for which they use demonstration method frequently.

*The biology teachers in my school usually use demonstration method since most of the laboratory materials such as chemicals and apparatus are not adequate to allow students to the activities themselves. Moreover, the absence of adequate working benches with sink for students, lack of water, lack of power sources (gas/electricity) on different working benches forced us to use demonstration method widely than other methods.*
Thus, demonstration is the widely used method by biology teachers in many preparatory schools from those included in the study. However, since about 50 percent of the schools under study have no functional laboratory, it is obvious that biology teachers in about half of the schools under study have limited opportunity to the demonstration method itself.

Thus, schools having limited opportunity to use demonstration methods may leads to lose several pedagogical advantages. As shown in table 2a, very large proportion of the preparatory school students involved in the study designated the none existent of practical activities (PA) in group, individually, in workshops and on fields during the teaching-learning of the practical parts of biology. Accordingly, 90.1%, 96.3%, 96.3% and 84.8% of them indicated their never using PA in group, individually, in workshops and on fields respectively. Similarly, 43.8%, 81.3%, 93.8% and 50% of the teachers revealed their never using PA in group, individually in laboratory, in workshops and on fields respectively. Moreover, department heads of biology interviewed confirmed the none existent of practical activities conducted by students in laboratory (individually or in group), in workshop and on fields for the teaching-learning of the practical parts of the subject.

Therefore, most of the preparatory schools under study are not in position to exploit all the advantages of practical works recognized by different scholars, since about 50 percent of the schools under study have no functional biology laboratory/workshop where students can conduct practical/hands-on activities and the rest 50 percent of the schools under study (those who have laboratory) have no the practices of allowing students.

Table 2b shows that majority (58.8%) of the chemistry teachers revealed their schools were never using plasma-TV simulations for the teaching-learning of chemistry practical parts (see table 2b). Similarly, significant proportion (42.9%) of the students indicated that their schools were not using Plasma-TV simulations for the teaching-learning of chemistry practical parts. Most of the chemistry department heads interviewed revealed that their teachers were not using plasma-TV simulations by indicating that Plasma-TV program was not functional in most of the schools under study. For instance, chemistry department head in school (S4) explained the issue of his school Plasma-TV program as follows:

_Currently, we are teaching in a newly constructed school compound which has no functional plasma-TV program and laboratory. Therefore, we are suffering_
to teach chemistry practical parts as designed in the curriculum. This problem is common for all science subjects teachers and other subjects those having practical activities.

Table 2b: Methods/techniques used for teaching Chemistry Practical Parts

<table>
<thead>
<tr>
<th>No</th>
<th>Methods/Techniques</th>
<th>Respondent</th>
<th>Never (1)</th>
<th>Rarely (2)</th>
<th>Sometimes (3)</th>
<th>Usually (4)</th>
<th>Always (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Students</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>Plasma-TV simulation</td>
<td>Students</td>
<td>42.9</td>
<td>16.2</td>
<td>16.2</td>
<td>7.3</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
<td>58.8</td>
<td>11.8</td>
<td>11.8</td>
<td>11.8</td>
<td>0.0</td>
</tr>
<tr>
<td>2</td>
<td>Teacher’s laboratory demonstration</td>
<td>Students</td>
<td>41.4</td>
<td>33.5</td>
<td>33.5</td>
<td>4.2</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
<td>58.8</td>
<td>35.3</td>
<td>35.3</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>3</td>
<td>Students’ conducting PA in group in laboratory</td>
<td>Students</td>
<td>86.4</td>
<td>10.5</td>
<td>10.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
<td>70.6</td>
<td>11.8</td>
<td>11.8</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>4</td>
<td>Students’ conducting PA individually in laboratory</td>
<td>Students</td>
<td>95.8</td>
<td>2.6</td>
<td>1.3</td>
<td>0.3</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
<td>94.1</td>
<td>5.9</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>5</td>
<td>Students’ conducting PA in workshops</td>
<td>Students</td>
<td>95.3</td>
<td>4.2</td>
<td>0.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
<td>94.1</td>
<td>5.9</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>6</td>
<td>Students’ conducting PA on fields</td>
<td>Students</td>
<td>96.3</td>
<td>2.6</td>
<td>1.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
<td>70.6</td>
<td>29.4</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Similarly, chemistry department head interviewed from school (S7) explained the status of Plasma-TV program service of his school saying:

*Plasma-TV program was not functioning in my school for the last two years. Thus, currently we have no the opportunity to use Plasma-TV simulation for the teaching-learning of chemistry practical parts.*

However, 58.1% of the students and 29.4% of the teachers indicated their using plasma-TV simulations rarely and/or sometimes (see table 4.2b). In the same vein the chemistry department heads interviewed from the schools those have functional plasma-TV program (that is department heads in school S3 and S8) did not deny their using it sometimes. Thus, plasma-TV simulations were in use for the teaching-learning of practical parts of chemistry in few preparatory schools only. In general, since the number of schools under study those have functional plasma-TV program as of the period of data collection for this study were very few in number (see table 4.1), it is obvious that most of them are not in a condition to use plasma-TV simulations for the teaching-learning of chemistry practical parts.
As indicated in table 2b, large proportion (58.8%) of the teachers responded that their schools were never using teacher’s laboratory demonstration for the teaching-learning of chemistry practical parts. Similarly significant number (41.4%) of the students shared the teachers’ response indicating they were never using teacher’s demonstration for the teaching-learning of chemistry (see table 2b). In contrast, the chemistry department heads interviewed from some of the recognized their teachers using demonstration method commonly. For instance, the chemistry department head interviewed from school (S1) explained how his school chemistry teachers use laboratory as follows.

*In my school, chemistry teachers mostly use teacher’s demonstration method for teaching chemistry practical parts as allowing students to do the activities themselves are impossible due to inadequate facilities and laboratory materials.*

On the other hand, chemistry department head from school (S5) explained his school practice regarding the use of demonstration method as indicated below.

*Chemistry teachers in my school use teacher's laboratory demonstration rarely since there is high scarcity of some chemicals and apparatus in my school chemistry laboratory.*

Another chemistry department head interviewed from school (S6) clarified his school practice regarding the use of teacher’s demonstration method for teaching chemistry practical parts saying:

*The chemistry teachers in my school almost always use demonstration method whenever they go to laboratory for practical activities, since the laboratory room facilities such as space, working benches and seats are not convenient to allow students to conduct the activities themselves besides the shortage of some chemicals and lack of skill to use some apparatus. But, my school chemistry teachers using of the demonstration method itself is very limited for the reasons mentioned above.*

As indicated in table 1, about 50 percent of the schools under study have no functional chemistry laboratory as of the period of data collection for this study. On the other hand, schools those have functional laboratory are not using the demonstration method properly due several reasons as mentioned above. Hence, the usage of teacher's demonstration method for the teaching-learning of chemistry
practical parts in the schools under study is very limited. From this result one can conclude that most of the schools under study are not exploiting the numerous advantages of demonstration method as mentioned by different scholars. For instance, Petty (2006) suggested that the aim of demonstration is to provide students with a concrete example of good practice to copy, adapt or learn technique. According to Petty, it is so vital for learning physical and intellectual skills: it shows how the task is carried out, what the task achieves, to what standard it should be carried out, the indicators that the task has been carried out successfully, and so on.

Moreover, table 2b also depicts the responses of the students and chemistry teachers regarding the practices of students conducting practical activities in laboratory, in workshop and on fields. Accordingly, most of the students (86.4%, 95.8%, 95.3% and 96.3%) of them replied that they were never conducting practical activities (PA) in laboratory being in group, in laboratory being individually, in workshop and on fields respectively. Similarly, most of the teachers that is 70.6%, 94.1%, 94.1% and 70.6% of them supported students' responses regarding the none existent of students conducting the practical activities themselves during the teaching-learning of chemistry practical parts (see table 2b). The result of interview with chemistry department heads agrees with the students' and teachers' responses. Therefore, there is no practice of allowing students conducting practical activities themselves in the teaching-learning of chemistry practical parts almost in all of the schools under study. Hence, the preparatory schools under study are deficient of the several advantages that can be obtained when students conduct chemistry practical/hands-on activities. According to Jenkins (2003:28) the aims of practical works are to develop manipulative skills and techniques; to encourage accurate observation and description; to discover or illustrate a concept, law or principle; to experience scientific phenomena; to motivate by stimulating interest and enjoyment; to develop certain ‘scientific attitudes’ such as open-mindedness and objectivity; to develop an understanding of experimental procedures and evidence and to get a “feel” for what it is like to be a problem-solving scientist.
Table 2c: Methods/techniques used for teaching Physics Practical Activities

<table>
<thead>
<tr>
<th>No</th>
<th>Methods/Techniques</th>
<th>Respondent</th>
<th>Never (1)</th>
<th>Rarely (2)</th>
<th>Sometimes (3)</th>
<th>Usually (4)</th>
<th>Always (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Students</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>Plasma-TV simulation</td>
<td>Students</td>
<td>47.6</td>
<td>17.8</td>
<td>25.1</td>
<td>7.9</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
<td>60.0</td>
<td>40.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2</td>
<td>Teacher’s laboratory demonstration</td>
<td>Students</td>
<td>61.3</td>
<td>30.4</td>
<td>6.8</td>
<td>1.0</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
<td>53.3</td>
<td>33.3</td>
<td>13.3</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>3</td>
<td>Students’ conducting PA in group in laboratory</td>
<td>Students</td>
<td>91.1</td>
<td>7.9</td>
<td>1.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
<td>73.3</td>
<td>20.0</td>
<td>6.7</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>4</td>
<td>Students’ conducting PA individually in laboratory</td>
<td>Students</td>
<td>97.4</td>
<td>2.6</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
<td>93.3</td>
<td>6.7</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>5</td>
<td>Students’ conducting PA in workshops</td>
<td>Students</td>
<td>88.5</td>
<td>9.4</td>
<td>1.6</td>
<td>0.5</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
<td>66.7</td>
<td>33.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>6</td>
<td>Students’ conducting PA on fields</td>
<td>Students</td>
<td>96.3</td>
<td>3.1</td>
<td>0.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
<td>80.0</td>
<td>20.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Significant proportion of the students (47.6%) indicated their schools haven't been using Plasma-TV simulations for the teaching-learning of Physics practical parts. Similarly, majority (60%) of the teachers supported students' responses, although 40% of them did not deny their using it rarely (see table 2c). Since very large proportion (87.5%) of the schools have no functional Plasma-TV program as indicated in table 4.1, it is logical to conclude that Plasma-TV simulations is serving rarely in the preparatory schools under study for the teaching-learning of physics practical parts.

The result of interview with Physics department heads also strengthens this limited usage of Plasma-TV simulations for the teaching-learning of the subject in most of schools under study. The physics department head in school (S3) said that:

*We use Plasma-TV simulations rarely for the teaching-learning of physics practical parts, since there is continuous interruption of the program in my school. Under such conditions we usually teach all physics contents theoretically.*

Physics department head in school (S8) explained his school practice in using Plasma-TV simulations for teaching physics practical parts saying:
The physics teachers in my school have been using Plasma-TV simulations effectively for physics practical activities. However, currently the service is less frequent as there is continuous program interruption.

In general, Plasma-TV simulations is rarely used for the teaching-learning of physics practical parts in the schools under study and this situation strongly affects the teaching-learning of physics as the schools fail to exploit the advantages. As shown in table 4.2c, 61.3% of the students and 53.3% of the teachers replied their never using teacher's laboratory demonstration for the teaching-learning of Physics practical parts. However, 30.4% of the students and 33.3% of the teachers recognized their using the method rarely (see table 2c).

The interviewed department heads of Physics revealed the relatively wide usage of teachers’ laboratory demonstration in about 50 percent of the schools under study. For instance, Physics department head in school (S8) has mentioned the degree to which they have been using demonstration indicating the rationale behind it as follows:

*For teaching Physics practical parts, we commonly use demonstration method, since the materials and facilities in my school are not adequate to allow students allow students to do the practical activities themselves. Similarly, physics department head in school (S6) enlightened the utilization of Plasma-TV simulations for physics practical parts as follows: In my school physics teachers use demonstration method sometimes since some materials are scarce in the school."

Very large proportion of the secondary school students and Physics teachers involved in the study designated the none existent of practical activities (PA) in group, individually, in workshops and on fields during the teaching-learning of the practical parts of Physics (see table 2c). As presented in the table, 91.1%, 97.4%, 88.5% & 96.3% of the students indicated the none existent of the practice of conducting practical activities in laboratory being in group, individually, in workshop and on fields respectively. Large number of the physics teachers that is 73.3%, 93.3%, 66.7% and 80.0% of them supported students' responses respectively. The result of interview conducted with Physics department heads is also in line with the responses of the students and the teachers. As heads in most of the schools have indicated their schools Physics laboratories are not in position to use other methods than demonstration due to a number of constraints. For instance, lack of
appropriate room, laboratory technician, apparatus and equipments were among the common constraints of the schools those forced them to limit themselves to demonstration method.

The Kinds of Materials Used in Secondary Schools Science Laboratories

The materials (chemicals and apparatus) which are commonly serving for laboratory practical works can be classified into industrial and local products depending on the ways they produced and place of production. Hence, using locally produced laboratory materials may enable schools to teach science practical parts more effectively. This implies that the materials we use in school laboratory determines the degree to which schools can use laboratory for teaching science subjects practical parts. To examine the practices of the schools under study regarding the kinds of laboratory materials they were using, a question was posed for both students and teachers and their response is presented in table 4.3 below.

Table 3: The kinds of Materials used in Preparatory Schools Science Laboratories

<table>
<thead>
<tr>
<th>No</th>
<th>Material</th>
<th>Subject</th>
<th>Never (1)</th>
<th>Rarely (2)</th>
<th>Sometimes (3)</th>
<th>Usually (4)</th>
<th>Always (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>S (%)</td>
<td>T (%)</td>
<td>S (%)</td>
<td>T (%)</td>
<td>S (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Industrial</td>
<td>Biol</td>
<td>38.2</td>
<td>31.3</td>
<td>14.1</td>
<td>0.0</td>
<td>25.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chem</td>
<td>39.3</td>
<td>29.4</td>
<td>10.5</td>
<td>29.4</td>
<td>8.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phys</td>
<td>43.5</td>
<td>13.3</td>
<td>53.3</td>
<td>15.2</td>
<td>8.9</td>
</tr>
<tr>
<td>2</td>
<td>Local</td>
<td>Biol</td>
<td>58.6</td>
<td>31.3</td>
<td>30.9</td>
<td>56.3</td>
<td>4.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chem</td>
<td>60.2</td>
<td>76.5</td>
<td>29.3</td>
<td>40.0</td>
<td>2.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phys</td>
<td>63.4</td>
<td>60.0</td>
<td>29.8</td>
<td>40.0</td>
<td>5.2</td>
</tr>
</tbody>
</table>

Table 3 designated the responses of both teachers and students regarding the kinds of materials used for the teaching-learning of the practical parts of the three science subjects separately. The usage of both industrial and local materials is very limited for all the three subjects as large proportion of the respondents indicated (see table 3).

For biology, 52.3% of the students and 31.3% of the teachers indicated their never/rarely using the industrial materials. Similarly, 89.5% of the students and 87.6% of the teachers revealed their never/rarely using the locally produced materials for teaching-learning of biology practical parts (see table 3). According to the responses of both teachers and students, the utilization of local materials is lower than that of the industrial one. The responses of Biology department heads interviewed are in line with the responses of the teachers' and the students'. For
instance, Biology department head in school (S5) stated his school situation as given below.

In my school biology laboratory, we usually use chemicals and apparatus imported from industrial countries; and the practices of producing and utilizing local chemicals and/or apparatus is very limited.

Similarly, Biology department head from school (S6) explained his school practice regarding the kinds of materials they were using for biology practical activities as follows.

Currently, we are not using the chemicals and apparatuses we have effectively due to the lack of skilled laboratory technician and teachers lack of adequate knowledge and skill to use the materials. The effort of producing and utilizing local laboratory materials is almost nil.

Therefore, the practice of producing and utilizing chemicals and apparatus locally is less familiar as compared to the usage of industrial materials for the teaching-learning of biology practical parts in the preparatory schools under study.

As shown in table 3, 49.8% of the students and 58.8% of the teachers indicated their never/rarely using industrial materials for teaching chemistry practical parts. However, larger proportion of the respondents, that is 89.5% of the students and 100% of the teachers revealed their never/rarely using the local materials. According to students' and teachers' responses, the utilization of local materials is less than that of the industrial one.

The results of interview conducted with chemistry department heads from schools S1, S5, and S6 also revealed the none existent of the practices of producing and utilizing chemicals and apparatus locally for the teaching learning of chemistry practical parts mainly due to the lack of skill and experience. As shown in table 3, 58.7% of the students replied their never/rarely using industrial materials. Majority (66.6%) of the physics teachers indicated their never/rarely using industrial materials in their school physics laboratory. The Physics department heads interviewed also revealed their using industrial materials better than the local one although that of the industrial itself is not satisfactory. Majority (93.2%) of the students and (100%) of the teachers indicated their never/rarely using the local materials for the teaching-learning of Physics practical parts in the preparatory
schools under study. The teachers and students responses were supported by the interviewed physics department heads. Thus, both the industrial and local materials were not used adequately for the teaching-learning of Physics practical parts.

Factors Affecting Preparatory Schools Using of Laboratory

Laboratory is one of the familiar methods used for the teaching-learning of science practical parts. It has multiples of goals as different scholars have suggested as indicated in the previous section. In spite of its multiple purposes and vital roles, there are a number of factors affecting the using of laboratory for the teaching-learning of science subjects practical parts. The responses of science teachers and students regarding these factors are presented in table 4a and 4b as follows.

Table 4a: Teachers' responses regarding the Factors Affecting Preparatory schools using of science laboratories

<table>
<thead>
<tr>
<th>No</th>
<th>Factor</th>
<th>Subject</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Never (%)</td>
</tr>
<tr>
<td>1</td>
<td>Lack of laboratory room</td>
<td>Biol.</td>
<td>56.3 12.5 6.3 12.5 25.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chem.</td>
<td>35.3 11.8 11.8 11.8 29.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phys</td>
<td>26.7 26.7 13.3 6.7 26.7</td>
</tr>
<tr>
<td>2</td>
<td>Lack of chemicals in the laboratory</td>
<td>Biol.</td>
<td>0 6.3 31.3 11.8 37.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chem.</td>
<td>17.6 11.8 23.5 35.3 17.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phys</td>
<td>13.3 6.7 46.7 20.0 26.7</td>
</tr>
<tr>
<td>3</td>
<td>Lack of apparatus/equipments</td>
<td>Biol.</td>
<td>6.3 43.8 62.5 35.3 29.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chem.</td>
<td>35.3 5.9 29.4 35.3 11.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phys</td>
<td>13.3 6.7 26.7 26.7 33.3</td>
</tr>
<tr>
<td>4</td>
<td>Lack of electric light in the laboratory</td>
<td>Biol.</td>
<td>6.3 0.0 25.0 12.5 56.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chem.</td>
<td>0.0 11.8 0.0 35.3 52.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phys</td>
<td>0.0 0.0 13.3 13.3 73.3</td>
</tr>
<tr>
<td>5</td>
<td>Lack of water in the laboratory</td>
<td>Biol.</td>
<td>12.5 18.8 25.0 18.8 25.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chem.</td>
<td>35.3 0.0 47.1 5.9 11.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phys</td>
<td>20.0 6.7 33.3 6.7 33.3</td>
</tr>
<tr>
<td>6</td>
<td>Lack of students' seats in the lab</td>
<td>Biol.</td>
<td>37.5 18.8 37.5 0.0 6.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chem.</td>
<td>35.3 17.6 23.5 11.8 35.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phys</td>
<td>40.0 26.7 20.0 6.7 80.0</td>
</tr>
<tr>
<td>7</td>
<td>Teacher's lack of skill</td>
<td>Biol.</td>
<td>0.0 0.0 6.3 25.0 6.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chem.</td>
<td>23.5 0.0 11.8 29.4 35.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phys</td>
<td>6.7 6.7 0.0 6.7 26.7</td>
</tr>
<tr>
<td>8</td>
<td>Lack of laboratory Technician in the school</td>
<td>Biol.</td>
<td>56.3 12.5 6.3 6.3 18.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chem.</td>
<td>35.3 17.6 17.6 11.8 17.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phys</td>
<td>53.3 13.3 0.0 6.7 26.7</td>
</tr>
</tbody>
</table>
As presented in table 4a, majority of the teachers recognized that most of the proposed factors were affecting their schools' using laboratory. However, “teachers' lack of interest” was not recognized as a factor by majority (56.3%) of the biology teachers and 52.9% of the chemistry teachers. Similarly, “laboratory technicians’ skill problem” was not recognized by 56.3% of the biology teachers and 53.3% of the physics teachers (see table 4a).

Majority of the teachers under study recognized that lack of laboratory room, lack of chemicals, lack of apparatus/equipments, lack of electricity, lack of water, lack of students' laboratory seats, lack of working benches, teachers' lack of skills and lack of laboratory technicians are among the affecting factors (see table 4a). As shown in the table, the teachers indicated different levels or degree to which the different factors affect schools using of laboratory. Moreover, the effect of the different factors are different for the three science subjects under study.

Table 4b: Students’ responses regarding factors affecting secondary schools using science laboratories

<table>
<thead>
<tr>
<th>No</th>
<th>Factor</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Never (1)</td>
</tr>
<tr>
<td>----</td>
<td>-----------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>1</td>
<td>Lack of laboratory room</td>
<td>25.7</td>
</tr>
<tr>
<td>2</td>
<td>Lack of chemicals in the lab.</td>
<td>7.9</td>
</tr>
<tr>
<td>3</td>
<td>Lack of apparatus/equipments</td>
<td>7.3</td>
</tr>
<tr>
<td>4</td>
<td>Lack of electric light in the lab.</td>
<td>14.7</td>
</tr>
<tr>
<td>5</td>
<td>Lack of water in the lab.</td>
<td>11.0</td>
</tr>
<tr>
<td>6</td>
<td>Lack of students' seats in lab.</td>
<td>21.5</td>
</tr>
<tr>
<td>7</td>
<td>Lack of working bench in lab.</td>
<td>22.0</td>
</tr>
<tr>
<td>8</td>
<td>Lack of convenient time for the students</td>
<td>37.2</td>
</tr>
<tr>
<td>9</td>
<td>Teacher's work load</td>
<td>42.9</td>
</tr>
<tr>
<td>10</td>
<td>Teacher's lack of skill</td>
<td>34.0</td>
</tr>
<tr>
<td>11</td>
<td>Teacher’s lack of interest</td>
<td>45.0</td>
</tr>
<tr>
<td>12</td>
<td>Students' lack of interest</td>
<td>49.7</td>
</tr>
<tr>
<td>13</td>
<td>Lack of laboratory Technician</td>
<td>12.0</td>
</tr>
<tr>
<td>14</td>
<td>Lab. Technician's low skill</td>
<td>16.8</td>
</tr>
<tr>
<td>15</td>
<td>Lack of support from different body</td>
<td>13.6</td>
</tr>
</tbody>
</table>

Majority of the students involved in the study replied that most of the proposed factors listed in table 4b were affecting secondary schools using of laboratory. As indicated in the table, most of the students recognized that three-fourth of the
proposed factors were affecting the preparatory schools using of laboratory. The students replied saying the factors affect "sometimes/usually/always. Accordingly, lack of laboratory room identified as a factor by 60.2% of the students involved in the study. Similarly, lack of chemicals denoted by 81.7%, lack of apparatus/equipments by 86.4%, lack of electricity by 65.4%, lack of water by 79%, lack of student's seats by 60.2%, lack of working benches by 54.4%, lack laboratory technicians by 75.9%, lab technician low skill by 67.5% and lack of support by 73.3% of the students.

On the other hand, majority of the students did not recognize one-third of the proposed factors. Hence, "lack of convenient time for the students", "teacher's work load", "teacher's lack of skill", "teacher's lack of interest" and "students' lack of interest" were not identified as affecting factors since majority (62.3%, 65.9%, 65.4%, 68.6% and 71.7%) of the students chosen "never" or "rarely" for each of the above proposed factors respectively (see table 4b).

Tables 4a and 4b depicted that both teachers and students involved in the study have recognized lack of laboratory room, lack of chemicals, lack of apparatus/equipments, lack of electricity, lack of water, lack of students' laboratory seats, lack of working benches, lack of laboratory technicians and lack of support were affecting the preparatory schools under study using of laboratory for the three science subjects. The interviewed science subjects department heads supported the teachers and students regarding the factors they have identified. However, most of the department heads suggested "teachers lack of skill" and "laboratory technicians skill problem" should also be the parts of the factors affecting secondary schools using of laboratory for the three science subjects.

For instance, biology department head in school (S6) explained his school situation as follows:

In my school there are chemicals and apparatuses which we failed to use since none of the teachers know how to use them. Similarly, the technician couldn't manage the issue. So, currently we have some materials in our laboratory which we are not using them.

Similarly, Physics department head in school (S8) mentioned his school issues as given below.
The person serving us as a laboratory technician in my school has no more role than unlocking and locking the laboratory room. He didn't take any training that helps him to give technical supports in laboratory. Moreover, some of our teachers have no adequate knowledge and skill to use the laboratory materials properly. So, such lack of knowledge and skill is hindering us not use laboratory to teach the practical parts in laboratory.

Conclusions
Depending on the major findings of the study, the following conclusions were drawn.

1. Some of the preparatory schools in all the four zones of Wollega use plasma-TV simulations alone to teach science subjects practical parts where as some other of them use teacher's laboratory demonstration. These two methods were alternatively serving in schools those have no both plasma-TV program and science subjects laboratory simultaneously. These two methods have limited pedagogical advantages since they do not allow students direct involvement in the process of teaching and learning. In other words, these methods do not enable students to learn by doing and they do not allow students interaction with materials of instruction.

The other methods which have high pedagogical advantage for teaching science practical parts such as students conducting practical activities in laboratory individually and being group, in workshops and on fields were used almost by none of the schools. This result implies that the preparatory schools in the area of the study are far lag behind in using the methods, which are pedagogically acceptable.

2. Most of the preparatory schools in this study area, especially those have functional laboratory were using the industrial/imported chemicals and apparatus widely instead of those produced locally. As revealed by this study, the root causes for using the expensive imported materials instead of the cheap local products in the preparatory schools of this study area is due to teachers' lack of experience and skill in producing and utilizing the local products. Currently, chemicals and apparatus are deficient in the preparatory schools since:

✓ most of them were utilized/consumed as they served for many years,
✓ some of them were expired/broken as they stayed in the schools beyond the fixed functioning time,
the organizations those had been providing the materials have already stop the provision, and
these chemicals, apparatuses and their spare parts are not available on market. Thus, teachers' lack of skill and experience to produce and utilize materials from the locally available resources is an additional challenge that affects the teaching-learning of science practical parts.

3. This study reveals that the preparatory schools in this study area are with multiples of sever challenges. The major bottle neck challenges or hindering factors identified were:

- Lack of laboratory rooms with appropriate size;
- Lack of adequate chemicals and apparatus/equipments;
- Lack/deficiency of laboratory facilities such as electric light, water, students’ seats and working benches;
- Lack of laboratory technicians;
- Lack of skill (teachers’ and laboratory technicians' low laboratory skill); and
- Lack of support.

Therefore, almost all of the preparatory schools in this study area are with most of these deficiencies. Although, laboratory is one of the well-liked methods for teaching science subjects practical parts, this large gap prevailed in this area need due attention and strong effort to reverse the condition.

**Recommendations**

Depending on the conclusions drawn the researcher has forwarded the following recommendations.

- Ministry of Education and/or Oromia education bureau in collaboration with universities should design program in order to minimize the shortage of science subjects laboratory technician graduates.
- The Ministry of Education should revise the science subjects curriculum materials in the way that science practical parts taught independently.
- Ministry of Education/Oromia Education Bureau in collaboration with Educational Media Agency should support schools in having functional Plasma-TV program.
- Oromia Education Bureau in collaboration with different stake holders should help the preparatory schools in having science subjects laboratory rooms with standardized size, basic infrastructures and facilities.
✓ Wollega University should offer continuous short-term trainings for science subject teachers and laboratory technicians in order to update their laboratory knowledge and skill specially that enable them to use the modern science kits and laboratory apparatuses.

✓ Wollega University in collaboration with other stakeholders should give skill training for science subjects teachers on how to produce and utilize laboratory materials from the locally available resources.

✓ The preparatory schools should urge the science subject teachers to use their level best efforts and creativity in producing and utilizing locally available materials instead of waiting for the industrial products.

References


Addressing First Year University Students’ Perceptual Learning Style Preferences: A Study on their Possible Relationships with Instructors Teaching Styles and Students’ Achievement

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Abstract
The purpose of this study was to identify students’ perceptual learning style preferences (PLSP) and their instructors’ preferred teaching styles (PTS) and to check whether there is significance differences between these modes of preferences and whether there is significance relationship between PLSP and students’ academic achievement. An exploratory survey design was developed. A total number of 226 students and 8 instructors who were selected, by purposeful sampling techniques, from eight English common course classes at first year level in WU took part in the study. The study used both quantitative and qualitative methods and collected data using, questionnaires, achievement tests and semi-structured interview. One of the questionnaires was used to identify students’ perceptual learning style preferences and the other was used to identify instructors’ preferred teaching styles. The data analysis of the first questionnaire revealed that students’ major learning style preferences were kinesthetic and visual learning styles. The analysis of the second questionnaire revealed that tactile and group modes of presentation were the first two most preferred teaching styles of instructors. The analysis with respect to their relationships revealed that none of the learning styles had a significant relationship with teaching styles. So, from the associations of the two modes of preferences, it can be concluded that there is a mismatch between students learning styles preferences and their instructors preferred teaching styles. Similar disparity is found between students’ perceptual learning style preferences and their academic achievements. This could imply that the students learning styles preferences were not properly addressed by their instructors teaching approaches. This has also been proved to be true during semi-structured interview conducted with four of the instructors. Therefore, it is recommended that first year EFL common course classrooms should be directed towards identifying and addressing students learning styles and matching them with instructor’s preferred teaching styles.

Keywords: Learning style, Preference, Teaching style, Modes of presentation
Introduction
Currently, an increasingly important concern among second/foreign language educators and professionals is the fact that whether or not individual difference should be given an important place in learning/teaching classroom (Mekasha, 2012). As a matter of fact, the new education and training policy launched in 1994, among other things recognizes: content-based problem solving and activity-based methodology. Accordingly, foreign language teaching practice has been grounded, for example, in the above two major components and then asserted that instructional materials, teaching methods, and classroom techniques would promote better language instruction.

Quite contrary to this assertion, however, there has been an increasing worry that students have not progressed as much as it was anticipated (Selime, 2003). Furthermore, it has been proved that none of these methods and techniques can work all the time, in all classes, with all students. As a result, some other scholars in the field changed the focus from the language content and teaching methodology to the language learner and the variables that affect language learning. This shift of the focal point has led to an increase in the number of studies carried out regarding learner characteristics. For example, addressing learning style preference has become one of the issues researchers have currently focused on. These styles are auditory, visual, kinesthetic, tactile, group and individual styles (Reid, 1995). What this implies that there are substantial (personality) differences in language learning; for example, what works for one student might not work for another.

However, it is claimed that most teachers are still found teaching their course materials in the way they were taught or in the way they preferred to learn. For example, research undertaken at different times on Ethiopia first year university students indicates that most students have not been successful in their academic career (Gebremedhin, 1993; Gessesse, 1999). Furthermore, it has been confirmed that the English common courses have not been effective in providing first year university entrants with the essential knowledge to succeed in their academic life (Betegiorgis and Abiy, 2015). Similarly, first year students at WU are found below the level of expected to carry out their academic performances (Eba, 2013; Ebissa, 2010). In fact, the researcher’s experience as an English teacher at Wollega University has also shown him that most EFL students experience difficulty in performing their academic tasks and activities.
The poor academic performance of the students may be due to different reasons. However, the researcher feels that this could happen partly because these students have not got a chance to appropriately utilize their preferred learning styles which fit the nature of tasks and activities given in English common courses. And, we EFL teachers are expected to identify and address our students’ learning style preferences to facilitate the teaching-learning process. This is for the reason that effectiveness in addressing students’ learning styles especially in English common course classes will have an insightful effect on students’ performance not only in English but also in other subjects.

Research carried out around this (addressing students’ learning styles) throughout the world strongly suggests two main possible means: (1) raising (self) awareness of students in employing multiple learning styles and (2) matching them with instructors teaching styles. As far as the first one is concerned, it is pointed out that the ability of students to employ multiple learning styles results in greater classroom success. In other words, success in students’ academic achievement requires attributes associated with learning/teaching style preferences. Regarding this, Hurtado in Tekiner, (2005) argued that addressing **learner diversity in learning climate has a positive effect on learning outcomes**. Moreover, Reid (1995) stated that developing an understanding of learning styles would enable students to take control of their learning and to maximize their potential for learning. Accordingly, raising students’ awareness regarding their learning styles might make them not only more prepared for learning but also more analytic about their learning styles.

Now, the logical question is ‘**Shouldn’t we bother about our students preferred learning styles?**’ Wollega University (WU) made it clear in recently published Instructors Handbook (2016, p. 50) that ‘a significant number of individuals have learning styles best served by pedagogical techniques other than lecturing’. As a result of this, it is pointed out that each faculty member in the university should engage in exploring his/her personal willingness to experiment with alternative approaches to instruction (ibid).

However, EFL teaching approach in Ethiopian higher education institutions does not address individual differences (Gebremedhin 1993). As Gessesse (1999, p. 26) argued, many programs in colleges and universities fail because they give instructions and practices that are not relevant to the academic needs of students.
Because of this, lessons are not catering for the real needs of the students. Seyoum’s (2012) study also pointed out this as one of the major challenges that the course instructors encountered in the classroom in addressing background differences among students (p. 160). In WU case, as indicated in Ebissa’s (2010) study, the needs of the students are not spelt out precisely. This is because the instructional approaches are one-size-fit-for-all and are not suitable for the students who come from different backgrounds, learning potentials (Gardner, 1993) and have different proficiencies in English language.

In fact, identifying students’ learning style preferences is only half of the journey since their preferences is affected by a number of variables (Oxford, 1990) among others with teachers preferred teaching styles. Hence, if language teachers, do not know, among other things, students perceptual learning style preferences in general and their preferred teaching styles in particular, ‘it is likely to be unfinished job’ (Seyoum, 2012). In short, what the discussion above implies that gaining more information about students’ learning styles can help teachers to make an appropriate selection of teaching methods and assessment strategies (Mekasha, 2012). Otherwise, EFL teachers might not help their students recognize the power of consciously using language learning strategies, for example, to take responsibility for their own learning by enhancing learner autonomy, independence, and self-direction (Oxford, 1990).

Indeed, Friedman and Alley (1984) suggest that teacher guidance can initially motivate students to identify and utilize their preferred learning styles and to take deliberate advantage of those preferences. In a similar vein, Mekasha (2012, p. 32-35) points out that EFL teachers should know their students learning styles before they start for planning for any kind of teaching and instructional activities. If teachers can show students the variety of learning styles by providing experiences in different teaching styles, the resulting awareness and expansion of student learning styles may better allow students to meet the demands of academic teaching methods and assignments. Similarly, Stebbins (1995) asserted that teachers should know the general learning style profiles of the whole class, which will enable them to organize and employ instructional materials accordingly.

Overall, it is quite clear from the discussion presented above that addressing students perceptual learning style preferences and matching them with their instructors preferred teaching styles are found very important in current research.
arena or post-method era (Kumaravadivelu, 2003). This is mainly because a mismatch between the teacher’s teaching style and learner’s learning styles might create conflicts which in turn might have negative consequences both on the part of the learner and teacher (Peacock, 2001). Based on these theoretical stipulations, the present researcher argued that first year students could develop their language ability in English to help them cope with their academic studies if the instructional approach could allow for individual differences. And, this should be expressed as an essential pedagogical initiative to foster more active involvement of student learning; unfortunately, such instructional approach remains untapped in the Ethiopian higher education institutions, particularly in Communicative English Skills course classes.

This has initiated me to embark upon the study that aims to identify the students’ learning styles and academic achievement, and investigate whether there is a significant relationship between students’ learning and teacher’s teaching styles and academic achievement in the selected field of specialization. In Ethiopia, as far as the knowledge of the researcher is concerned, no local studies are conducted on this topic.

By answering these four questions, this study would make the following contributions: First, students could get opportunities to express their innate potentials and talents. In addition, knowledge of the relationship between perceptual learning style preference and achievement will provide insight to EFL teachers’ taking into account the appropriate factors in language learning training. Furthermore, it will offer invaluable feedback to curriculum designers and textbook or module writers on the impacts of students learning style preferences on their achievements to take necessary measures. Lastly, it can provide useful information for comparative studies.

**Materials and Methods**

This study was exploratory in character aiming at finding vivid assertions about perceptual learning/teaching style preferences of first year students including their instructors while English common course was given at WU Nekemte campus. Moreover, it also examined the relationship between students and their teachers’ modality preferences (between these two variables) and students’ academic achievement.
Participants of the Study

Participants were chosen based solely on the convenience method (the researcher’s students were used). Participants were chosen from first year students who did not object to participating in the study at four Colleges (two programs from each) of WU Nekemte campus. Two hundred twenty six students participated in the study. Their age range was between 18 and 21; the sex distributions were Midwifery (n=31); Pharmacy (n=28); Economics (n=27); PADM (n= 36); GIS (n=25); Geology (n=29) 14; Computer Science (n= 22); and Pre-engineering section B (n= 22). Eight instructors teaching under these programs were also involved.

Instruments of Data Collection

Questionnaire

A self-reporting questionnaire was developed on the basis of existing learning style instruments and administered to 8 programs across the campus, taking English language common course volunteered to participate in the study. All students in those programs including their instructors were asked to respond on a voluntary basis to the questionnaire as it applies to their learning English as a foreign language involved in various undergraduate major fields at Wollega University. In this study, two self-report inventories were used. Firstly, the Perceptual Learning Style Preference Questionnaire (PLSPQ) was used to identify students’ perceptual and social learning style preferences. It covers concept of six learning style preferences: visual, auditory, kinesthetic, tactile, group learning and individual learning. In the inventory, there are statements which participants’ rates on a five-point likert scale, ranging from strongly agree to strongly disagree. Secondly, to identify instructors’ preferred teaching styles in their classrooms the researcher developed closely related instrument from reviewing literature to assess how often these are practiced. In the list, there are statements, on a four-point likert scale, ranging from always done to rarely done. In addition, students’ achievement test scores registered for English Communicative Skills’ course (EnLa 1011) in first semester of 2015/2016 were used to determine students’ achievements in academic performances.

Interview

Along with students/instructors questionnaires and success of students’ achievement, it also employed semi-structured interview technique to seek data applicable to this research from four interviewees. Using this instrument the present researcher wanted to assess and elicit the instructors’ reflection on and the
effectiveness of the different teaching styles employed while teaching ‘English Communicative Skills’ course. The four instructors were asked to think about how they typically handled or did the task. These questions were developed on the bases of the literature reviewed that discusses theories of Learning Style. Accordingly, an interview schedule guide which contained 7 broad, open-ended questions was constructed in the form of a list of questions and it was recorded using audio-recording method.

**Method of Data Analyses**

The individual students’ answers to the questionnaire were calculated on the basis of the original systems designed by Reid. As recalled, Reid (1987) provided three cut-off scores for major learning style preference (38 and above, i.e., out of 50), minor learning style preference (25-37), and negligible learning style preference (24 or less) to analyze the data; however, in this study the scores received from the PLSPQ were broken down into three ranges just like Reid (1987) but changed into decimal form for example for major learning style preference (3.8 and above, i.e., out of 5), minor learning style preference (2.5-3.7), and negligible learning style preference (2.4 or less) to analyze the data. However, instructors’ answers to the questionnaire were calculated on the basis of descriptive statistics. Similarly, students’ achievement test/exam scores for Communicative English Skills course were received, for the analyses. The Pearson correlation was computed to be able to identify the nature and strength of the relationship between students’ perceptual learning style preferences and success in their academic achievement in one hand and teachers’ preferred teaching styles on the other.

**Results**

The first research question was answered based on data collected from the perceptual modality preferences of the students using PLSPQ.

**Table 1**: Mean Values and Frequency Distribution of Students’ Perceptual Learning Style Preferences

<table>
<thead>
<tr>
<th>No</th>
<th>Learning Style Preferences (N=36)</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Std. Error</th>
<th>Major</th>
<th>Minor</th>
<th>Negligible</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Auditory</td>
<td>4.0633</td>
<td>.39814</td>
<td>.066</td>
<td>29</td>
<td>16.6</td>
<td>1.28</td>
</tr>
<tr>
<td>2</td>
<td>Visual</td>
<td>4.1337</td>
<td>.36721</td>
<td>.061</td>
<td>34</td>
<td>94.4</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Kinesthetic</td>
<td>4.1543</td>
<td>.32013</td>
<td>.053</td>
<td>32</td>
<td>88.9</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Tactile</td>
<td>3.9498</td>
<td>.39827</td>
<td>.066</td>
<td>26</td>
<td>72.2</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Group</td>
<td>4.0259</td>
<td>.36877</td>
<td>.061</td>
<td>24</td>
<td>66.7</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>Individual</td>
<td>3.8167</td>
<td>.44444</td>
<td>.074</td>
<td>20</td>
<td>55.6</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.0239</td>
<td>.30263</td>
<td>.050</td>
<td>29</td>
<td>80.6</td>
<td>19.4</td>
</tr>
</tbody>
</table>

f= Stands for frequency
As seen in Table 1 above, the participant students reported a major preference (i.e. a mean of 3.7 or above) for all learning styles; with slight mean differences, i.e., kinesthetic (mean of 4.15), visual (m= 4.13), and auditory (m= 4.06) were the first three most preferred perceptual learning styles of the students. This suggests that students preferred most to learn by involving themselves in physical responses such as doing something or participating in activities. In addition, they preferred to learn best through demonstration and hearing or listening to the information of their instructors that could be taken as the second and third major perceptual leaning style preferences of participant students respectively. On the contrary, group (m= 4.02), tactile (m= 3.94), and individual (m=3.81) learning styles were the last three learning style preferences of these students.

Generally, the results showed that first year EFL students participated in this study had multi-style preferences for perceptual learning styles. As seen in the same table, most of the students (80.6 %) showed a major learning style preference profile and only (19.4%) of students showed the minor one. Participants in this study did not report a negligible preference. This implied that these students can be very flexible in approaching and learning new information, which provides an advantage for learning. In short, students showed a tendency to prefer learning new material through activities including bodily involvement, which are presented as doing experiments and role-playing in the PLSPQ.

<p>| Table 2: Mean Values and Frequency Distribution of Instructors' Preferred Teaching Style |
|-----------------------------------------------|------------------|------------------|------------------|------------------|</p>
<table>
<thead>
<tr>
<th>No</th>
<th>Teachers preferred mode of presentation (N= 8)</th>
<th>Mean</th>
<th>Scales</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mode of presentation</td>
<td></td>
<td>Always</td>
</tr>
<tr>
<td>----</td>
<td>-----------------------------------------------</td>
<td>------</td>
<td>--------</td>
</tr>
<tr>
<td>1</td>
<td>Auditory</td>
<td>2.27</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Visual</td>
<td>2.83</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Kinesthetic</td>
<td>2.79</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Tactile</td>
<td>3.04</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Group</td>
<td>3.00</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Individual</td>
<td>2.62</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggregate</td>
<td></td>
<td>2.76</td>
<td>--</td>
</tr>
</tbody>
</table>

f= Stands for frequency

As seen in Table 2 above, instructors involved in the study would like to present the course material (tasks, and activities) using tactile and group modes of lesson presentations. These could be seen from their reports depicted in the same table:
Tactile (mean of 3.04), and Group (m= 3.00) were the first two most preferred teaching styles of the instructors. This suggests that first year university instructors teaching Communicative English Skills course preferred most to teach through active learning methodology and student-centered approach. These would be done by assigning students in doing something physically, such as writing, etc or participating in activities that require hand movements in classroom. In addition to tactile mode of lesson delivery, they preferred to teach students best through group works. On the contrary, individual (m= 2.62), and auditory (m=2.27) mode of lesson presentations were the last two least preferred teaching style preferences of these teachers.

The second research question was answered based on data collected from Students Learning Style preferences and scores of achievement test.

Table 3: Significance Difference between the Mean Scores of Each type of LS Preferences and language achievement (N=36).

<table>
<thead>
<tr>
<th>Aggregate Students</th>
<th>auditory</th>
<th>visual</th>
<th>kinesthetic</th>
<th>tactile</th>
<th>group</th>
<th>individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Style preferences</td>
<td>LS</td>
<td>LS</td>
<td>LS</td>
<td>LS</td>
<td>LS</td>
<td>LS</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-.114</td>
<td>-.025</td>
<td>-.032</td>
<td>-.031</td>
<td>-.271</td>
<td>-.005</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.509</td>
<td>.886</td>
<td>.853</td>
<td>.859</td>
<td>.110</td>
<td>.977</td>
</tr>
</tbody>
</table>

As seen in Table 3, students’ learning style preference does not have significant relationship with students test result. The Pearson correlation and statistical significant value \[ r (-.114) = .509, p > .05 \] indicate that learning style preference of students correlate negatively with their academic achievement. Moreover, the p-value indicates the absence of significant relation between them as the calculated value is greater than the expected significance p-value of 0.05. This, in fact, happens to be true when we take students’ learning style preference as a whole entity. The question is, does the whole the sum of its parts?

The same table attempts to answer this question by showing the simple correlation coefficient between academic achievement and each of students’ learning styles. To examine the relationship of test result with perceptual learning style preferences, Pearson’s product-moment correlation coefficients were applied to the data set. The
results indicated the existence of a negative and insignificant correlation between them. Apparently, based on the information depicted in Table 3, it is possible to realize that each learning style correlates negatively from low to average levels of value with their academic success. For example, auditory learning style correlates negatively and insignificantly with achievement \([r (-.025) = .886, p > .05]\). The same is true for the remaining associations’ between each style and academic achievement. Generally, from the above discussion it can be concluded that foreign language achievement cannot be predicted from each learning style preference, either the whole taken as together or the part of each taken as an independent entity. Another matter of importance is whether or not the negative and insignificant correlation between the above two variables are reflected in the different major fields and groups of academic achievers.

Table 4: Mean Values of Students Achievement Test Scores and the Two Groups Perceptual Learning Style Preferences (PLSP)

<table>
<thead>
<tr>
<th>Field of specialization</th>
<th>Achievement test result</th>
<th>Two Groups</th>
<th>N</th>
<th>Students perceptual learning style Preferences</th>
<th>Mean</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midwifery (N=31)</td>
<td>52.1</td>
<td>High achievers</td>
<td>17</td>
<td>Low achievers</td>
<td>4.0392</td>
<td>.374</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14</td>
<td></td>
<td>3.6508</td>
<td>.384</td>
</tr>
<tr>
<td>Pharmacy (N=28)</td>
<td>69.0</td>
<td>High achievers</td>
<td>16</td>
<td>Low achievers</td>
<td>4.0573</td>
<td>.076</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12</td>
<td></td>
<td>4.1898</td>
<td>.013</td>
</tr>
<tr>
<td>Public Administration</td>
<td>58.8</td>
<td>High achievers</td>
<td>19</td>
<td>Low achievers</td>
<td>3.8377</td>
<td></td>
</tr>
<tr>
<td>(N=36)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.0654</td>
<td>.727</td>
</tr>
<tr>
<td>Economics (N=27)</td>
<td>60.6</td>
<td>High achievers</td>
<td>16</td>
<td>Low achievers</td>
<td>4.0660</td>
<td>.506</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11</td>
<td></td>
<td>4.1496</td>
<td>.011</td>
</tr>
<tr>
<td>Geology (N=29)</td>
<td>53.8</td>
<td>High achievers</td>
<td>16</td>
<td>Low achievers</td>
<td>4.2465</td>
<td>.244</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>13</td>
<td></td>
<td>3.8274</td>
<td>.924</td>
</tr>
<tr>
<td>GIS (N=30)</td>
<td>55.0</td>
<td>High achievers</td>
<td>11</td>
<td>Low achievers</td>
<td>3.9621</td>
<td>.598</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11</td>
<td></td>
<td>4.2652</td>
<td>.506</td>
</tr>
<tr>
<td>Computer Science(N=22)</td>
<td>64.3</td>
<td>High achievers</td>
<td>11</td>
<td>Low achievers</td>
<td>3.8788</td>
<td>.013</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11</td>
<td></td>
<td>3.7525</td>
<td>.024</td>
</tr>
<tr>
<td>Pre-engineering (N=22)</td>
<td>67.9</td>
<td>High achievers</td>
<td>17</td>
<td>Low achievers</td>
<td>4.0562</td>
<td>.506</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.9879</td>
<td>.013</td>
</tr>
<tr>
<td>Aggregate students</td>
<td>59.7</td>
<td>High achievers</td>
<td>19</td>
<td>Low achievers</td>
<td>4.0562</td>
<td>.506</td>
</tr>
<tr>
<td>LS preference (N=36)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.9879</td>
<td></td>
</tr>
<tr>
<td>of whole programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.924</td>
</tr>
</tbody>
</table>

As depicted in Table 4, the significance value for higher and lower language proficiency students in applying perceptual learning style preferences was the \(t\)-value \((t=-.671)\), the degrees of freedom \((df=34)\), and sig. (2-tailed) \(.506\), which was higher than .05. Therefore, there was no significant difference between the two
groups in applying perceptual learning style preferences which indicates the fact that higher language proficiency students (M =4.056) on average applied the same or equal number of perceptual learning styles as lower language proficient students (M=3.987). As a result, it is possible to say that, though higher language proficiency students were advanced in registering better results, the difference in their perceptual learning styles preference of higher and lower language proficiency students was not significant. Now, the next question that needs to be answered is would these be true under each of the fields/programs? The above table attempts to demonstrate the issue at some lengths but let us see here only two them as an example.

As seen from the same Table, the significant value of Economics major students was (.013), which was lower than .05. Consequently, it can be concluded that the difference in overall perceptual learning style preference of higher language proficiency and lower language proficiency students’ was significant, which indicated the findings showing that higher language proficiency students of Economics major preferred more perceptual learning style preferences (M=3.9340) than lower language proficiency participants (M=3.4318) which was statistically significant. Similar statistical significant was registered by Computer Science major students. As depicted in Table 4 the significance value of Computer Science major’s for higher and lower language proficiency in applying perceptual learning style preferences was the t-value (t=-2.438), the degrees of freedom (df=20), and sig. (2-tailed) =.024, which was lower than .05. Therefore, though there was significant difference between the two groups in applying perceptual learning style preferences, quite opposite to Economics major’s, it is lower language proficient students (M=4.265) utilize large number of perceptual learning styles than higher language proficiency students (M =3.962).

What can be inferred from the above two scenarios’ is that field of specialization was a significant indicator of the difference in perceptual learning style preference between higher and lower language proficiency students. Is there any reasons behind that can be given as a reason for such anomalies? Do instructors play important roles in attaining such variations?
Table 5: Significance Difference between the Mean Scores of Students LS Preferences and Teachers Preferred TS

<table>
<thead>
<tr>
<th>Teachers preferred teaching style</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.001</td>
<td>.997</td>
<td>8</td>
</tr>
</tbody>
</table>

As the results, in Table 5 indicated, all of the students learning styles preferences had no a statistically significant relationship with their instructors preferred teaching styles. This implied that instructors could not allow the different modes of absorbing information by supplementing text, for example, with visual/demonstration; oral/aural cues; role-play/simulation; and group and independent activities. This means that instructors’ teaching Communicative English Skills could not show the way their students to deep understanding of the contents. What this suggested that students are not absorbing essential information, which in turn implies that they did/do poorly in their work. This means that the students who participated in this study have faced a lot of difficulties in following their classroom lessons. However, it is expected that instructors should have been exerting or discharging great responsibility to help their students chose and integrated a wide variety of learning activities and materials to address various learner preferences.

Discussion
As discussed above, the purpose of the study was to investigate students’ perceptual learning style preferences and instructors’ preferred teaching styles; and then to find out whether there were relationships between students’ learning style preferences, and English language performances registered in test results and also their instructors preferred teaching styles.

Table 6: General Overview of Instructors Preferred Teaching Style and Students perceptual Learning Style

<table>
<thead>
<tr>
<th>Order of Preferences</th>
<th>Students perceptual Learning Style: From most (1) to least (6) preferences</th>
<th>Instructors preferred Teaching Style: From most (1) to least (6) preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kinesthetic (m= 4.15) Tactile (m= 4.13) Group (m= 4.06) Visual (m= 4.02) Group (m= 3.94) Kinesthetic (m= 3.81) Tactile (m= 3.81) Audio (m= 3.79) Tactile (m= 3.04) Group (m= 3.00) Visual (m= 2.83) Individual (m= 2.62) Individual (m= 2.27)</td>
<td>Kinesthetic (m= 4.15) Tactile (m= 4.13) Group (m= 4.06) Visual (m= 4.02) Group (m= 3.94) Kinesthetic (m= 3.81) Tactile (m= 3.81) Audio (m= 3.79) Tactile (m= 3.04) Group (m= 3.00) Visual (m= 2.83) Individual (m= 2.62) Individual (m= 2.27)</td>
</tr>
</tbody>
</table>
As seen in Table 6 above, the participant students reported a major preference for all learning styles. By and large, the results showed that first year EFL students participated in this study had multi-style preferences for perceptual learning styles. As seen, most of the students (80.6%) showed a major learning style preference profile and only (19.4%) of students showed the minor one. But kinesthetic (m= 4.15) and visual (m= 4.13) learning styles were taken as a very dominant ones compared with others. This suggests that students preferred most to learn by doing something or participating in activities including bodily involvement, and role-playing. This finding was compatible with the earlier studies (Reid, 1987; Stebbins, 1995; Reid, 1998). However, students in all fields indicated that individual learning style (m= 3.81) was the least preference of them. This finding was not congruent with the findings of Reid (1998).

As seen in the same table, the six students’ learning style preference categories were not related to instructors preferred teaching styles categories. For example, the kinesthetic learning style and visual learning style were the first two most preferred learning style preferences of students. On the other hand, tactile and group’s mode of presentations were the first two most preferred teaching style of instructors. The last two least preferred perceptual learning styles of students were tactile and individual; whereas individual and auditory mode of presentations were the least preferred teaching styles of instructors. This could entail that the students learning styles preferences were not matching with their instructors teaching approaches. This is the same in Peacock’s (2011) study.

What this finally implies that no significant positive correlation is found between students learning style preferences and corresponding preferred teaching styles of their instructors. This in turn implied that instructors could not allow their students in utilizing their different perceptual learning style preferences. This further to mean that instructors’ teaching styles could not be in line with their students preferred ways of absorbing essential information or their deep understanding of the lessons, tasks and activities in the course Communicative English Skills.

In fact, the interview results revealed the challenges instructors face in addressing students’ PLSP while they were teaching Communicative English Skills in the classroom. As mentioned, though instructors have theoretically recognized the importance of addressing students learning styles, they have not attempted in putting them practically by changing their methods of teaching. However, the
common concern forwarded by all interviewees is 'instructors should use a teaching method which is motivating and participatory to all students having different perceptual learning style preferences'. Accordingly, all teachers should be expected to have common understanding and awareness about the different types of learning styles in classroom to facilitate students’ academic achievements.

Conclusions

The findings of this study supported the assumption that it is possible for instructors to teach and reach more students who have different learning style profiles. Moreover, these (teaching and reaching) would create appropriate learning environments that ensure a means of strengthening students’ awareness on learning style use. Furthermore, the instructional approach offered by EFL teachers needs to be examined in the light of human differences. From the instructors’ interview results, it is possible to draw that the students’ preferred learning styles were not properly handled in EFL classrooms. In this regard, it should be emphasized that addressing limited numbers of students’ learning style could not be sufficient to achieve success in their academic career. As a result, the course instructors should deliberately design tasks and activities to their students to make use of different learning styles. This could be done as an introductory portion or sub-topic at the beginning of first chapter of Communicative English Skills course. Finally, various pedagogical implications can be drawn for teachers, students and material producers from the findings and conclusions of the present study.

- Teachers have to be aware of students’ learning styles as well as their own learning/teaching styles. They have responsibilities to provide multiple opportunities for their students to investigate and identify their learning styles.
- Students need to be aware of their learning styles. They also need to know what learning styles are appropriate in a given learning situations and learning purposes.
- Students who used a relatively very few number of learning style would be directed to employ more styles in the future and increase the variety of their strategies.
- The instructional materials which instructors prepare are expected to match with students’ learning styles profiles and they should be appealing to their needs and interests. For this reason, first year EFL common course instructor is expected to be a researcher in his/her respective courses while teaching them in the classrooms.
References


Mekasha Kassaye (2012). Subject Area Teaching in English Language for Teachers: *Module One*. Addis Ababa University College of Education and Behavioural Studies Department of Social Sciences and Languages Education


Tekiner, A. (2005). The Relationship between Perceptual and Social Learning Styles and Multiple Intelligences and their Effects on English Proficiency of Turkish Young Adults Learning English as a Foreign Language. A Thesis Submitted to the Graduate School of Informatics of the Middle East Technical University.
