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Teachers' Awareness, Attitude and Practices towards Multiple Intelligences in Education

The case of Dembi Primary School in Illubabor Zone.

Ayele Lemma

Approved by Boards of Examiners:

Abdulaziz Hussen	21-7-09	
Chairman, Person Department Graduate Committee	Date	Signature
Worku Kassaye	09/07/09	
Advisor	Date	Signature
Temesgen Fajja	09/07/09	
Examiner	Date	Signature

ADDIS ABABA UNIVERSITY COLLEGE OF EDUCATION
DEPARTMENT OF TEACHER EDUCATION & CURRICULUM STUDIES

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Abstract

The purpose of the study was to explore teachers' awareness, attitude and their practices towards multiple intelligences (MI) in education. The data were collected from Dembi government primary school from the principal, teachers and students via semi-structured interviews, and observation and analyzed using qualitative method of analysis. Relevant recordings about school setting were also analyzed. The participants for interview were selected purposely based on their willingness, professional competence and responsibilities. Thirteen participants i.e. the school principal, eight teachers and four students from grades 5-8 each from specified grades were interviewed. The result revealed that teachers' awareness towards MI in education was varied but confined to limited markers of MI. The study confirmed that teachers have good understanding of children's diverse strengths/aptitudes in relation to education mainly in terms of analytic (linguistic and logical /mathematical), interpersonal, kinesthetic, and visual/spatial but showed reservation about their awareness of, Musical and Naturalist intelligences. Moreover, teachers have desirable attitude towards and implementing MI in education. On other hand, teachers' practices to approach a subject matter from MI perspectives were very low and efforts to provide opportunities where learners participate according to their aptitudes/ strengths were ignored. The findings indicate that students usually confined in classrooms to acquire information or facts of subject matter verbally and the learning experiences did not accommodate the diverse students. Consequently, for instance students who were not attentive to the verbal transmission of subject matter and found practicing other things were discouraged both by teachers and students. Possible attempts have been made to identify those factors for teachers' failure in practicing MI in education. These were absence of training, giving due attention to coverage of the course and lack of understanding on MI in education. Finally, possible solutions were proposed to improve the observed problems and to enhance the awareness of teachers.

CHAPTER ONE

1. Introduction

1.1 Background of the Study

Multiple intelligence (MI) refers to a learner-centered philosophy that characterizes human intelligences as having diverse dimensions that must be acknowledged and developed in education (Richards and Rodgers, 2001; Mulat and Janetius, 2006). Accordingly, Chapman (2008) states children's multiple/diverse intelligences provide an indication of their preferred learning styles.

Gardner (1993) notes that traditional Intelligent Quotient (IQ) tests measure only logic and language, yet the brain have other equally important types of intelligences/strengths. In relation to this, Bruce and Meggitti (1996:171) suggested that "IQ tests measures particular kinds of intelligence, such as memory span and ability with numbers" this means that they only look at intelligence in a narrow way and they do not help us to look at individuals' diverse mental powers /potentials.

Gardner (1993) argues human beings have diverse intelligences, but people vary in the strength of their particular faculties and combination of intelligences. He believes that all of them can be developed through training and practice. Therefore, diverse instructional strategies in line to learners' learning style, preference or intelligences could be used to encourage students to learn through their strengths/aptitudes and help students to compensate for their weakness (Mulat and Janetius, 2006; Hoerr, 2004; Nelson, 1998). Similarly, Richards and Rodgers (2001: 115) stated that "MI belongs to a group of instructional perspective that focus on differences between learners and the need to recognize learner differences in teaching."

Gardner (1993, 1999) by criticizing the traditional and narrower approach to human intelligence, posits eight different intelligences to account for broader range of human potential/capability. These intelligences are: Linguistic, Logical /mathematical, Spatial/ visual, Musical, Bodily /kinesthetic, Interpersonal, Intrapersonal and Naturalist intelligences.

Implementing MI in education supported by educator for various reasons. First, it acknowledges children's particular gifts and talents and provides learning activities that build on these inherent gifts. As the result of strengthening such differences individuals are free to be intelligent in their own ways (Reed and Begemann, 1995; Bruce and Meggitti, 1996). Second, it enables students to learn and think in many different ways according to their learning styles, preference or natural strengths for "understanding" a concept or subject matter and to develop their weakness (Gardner, 2004: 111).

Thirdly, it provides educators with conceptual framework for organizing and reflecting on curriculum assessment and pedagogical practices (Solomon, 2005; Mulat and Janetius, 2006 and Nelson, 1998). In other words, MI revealed a way for incorporating other intelligences into instruction, rather than simply relying on the linguistic and logical /mathematical approach to teaching for deep knowledge or understanding in education (Hoerr, 2004; Gardner, 2004).

Likewise, to develop the diverse intelligences of learners, schools should reinforce the learning environment that nurtures the development of the full range of human capacities to develop the multifaceted mind and to encourage natural giftedness.

To this point, Campbell et al. (1992: 207) contend as:

> *The theory of multiple intelligences underscores the responsibility of educational institutions to engage each child's talents some where in his or her schooling career, it is vital that each child discover at least one area of strength. The student may then delight in pursuing an area of inherent skill and intrinsic interest. Such pursuits not only nurture joy in learning but also they fuel the required persistence and effort necessary for mastery and inventiveness.*

On the other hand, if students do not discover an area or areas of interest, they may never develop an interest in learning and may instead travel aimlessly through school or abandon formal learning altogether (Hoerr, 2004 ; Cohen, 2001).

For this, the school and its activities are intended to create environment which enable students to develop diverse capabilities. MI in education designed to support the development of the "whole" person by removing individual limitations (Nelson, 1998; Richards and Rodgers, 2001). To this, schools should be unrelenting in its efforts to nurture and develop learners' multiple intelligences (Mulat and Janetius, 2006).

Similarly, to implement the MI in education teacher's perception of student's intelligences/strengths should be changed from absolutely relying on analytic (verbal/linguistic and logical/mathematical) ability, the ability to acquire academics skills as if it encompassed the diverse capabilities (Gardner 2004; Richards and Rodgers, 2001).

How teachers conceptualize intelligence could influence the implementation of MI in education (Solomon, 2005). If teachers adopt the definition of intelligence as analytic (linguistic and mathematical) skills, their schooling reflects that definition by focusing on the acquisition of academic skills. On the other hand, if teachers broaden their definition of intelligence, as does MI theory, they have a reason to enrich their instruction and curriculum (Nelson, 1998; Hoerr, 2004; Solomon, 2005).

Likewise, Bruce and Maggitti (1996) suggest teachers should realize the multiple nature of intelligences. This awareness would lead them to help students discover their own pattern of strengths and weakness. Supporting this, Nelson (1998) suggest in MI classroom, the teacher assumes that every student is unique, that each has his own distinct profile of cognitive skills and is potentially fitted in one or more intelligences.

Teachers have to be aware, have positive attitude and have the knowledge of lesson planning and assessment strategies that utilize the diverse intelligences as well as how to recognize the diverse intelligences in the students they teach (Campbell et al., 1992). The job of the teacher then becomes identifying the ways in which children exhibit intelligence and using their particular strength to help them to learn (Hoerr, 2004).

Therefore, teachers need to be aware of multiple intelligences of a learner, committed and energetic to apply a variety of strategies that foster the diverse intelligences; to increase learning opportunities in different ways. As the result, students have opportunities both to learn through their strength and to stretch in to other way of learning and growing (Mulat and Janetius, 2006).

The implementation of MI in education also requires the schools transformation such as the inclusion of MI experiences in to the existing curricular lessons, units, and course to

enrich teaching and learning (Reed and Bergemann, 1995; Hoerr, 2004). However, if a teacher adopts learner's intelligence/capability in narrow way of academic skills, then the implementation of MI is ineffective (Solomon, 2005; Nelson, 1998). Teachers need to be aware of the diverse natural strengths/aptitudes of learners to present their lesson in a wide variety of ways according to learner's learning styles, preferences or intelligences. In light to this, teachers should regularly introspect themselves to know what is their current teaching methodology and how it could be improved in multidimensional way. Thus, teachers need to evaluate their own knowledge, understanding and awareness about learners' diverse intelligences in order to effectively implement MI in education (Mulat and Janetius, 2006).

Therefore, teachers' awareness, attitude and professional skills towards MI in education appear to be crucial for successful implementation of MI in schools.

1.2 Statement of the Problem

As a matter of fact, students having diverse capabilities/aptitudes come to school. Gardner (1993) stated that, it makes no sense to think of some one in general term smart or not so smart as implied in traditional view of intelligence, hence children demonstrate intelligence in many different ways. The school, then need to identify the way in which children exhibit intelligence and use their particular strengths to help them learn (Hoerr, 2004).

Taking the basic premises of multiple intelligences concept in to account, many western countries have looked to design the whole schools and to structure the curriculum to nurture the learners according to their intelligences and to the problems of schooling (Smith, 2008).

Accordingly, The New Education and Training Policy of Ethiopia (NETP), (1994) gives attention to the need for a broader agenda, which focuses to improve the identified problems of equity, quality, relevance, efficiency and access in the pre 1991.

The present education objectives of Ethiopia, which help educators in guiding the educational activities, as they appear in the NETP (1994), are to develop individuals'

1.5 Significance of the Study

The major significance of the study is:

1. Portray the current understanding and awareness of teachers towards MI in education that would serve for policy makers, to think over the issue in depth so as to design appropriate measures on time.
2. Provide base line information about the existed professional knowledge, attitude and skills of teachers on the implementation of MI that can be used to design intervention programme in the form of on-the-job training.
3. Call the attention of the researchers to the issue of MI in education in the Ethiopian context.

1.6 Delimitation of the Study

This study is planned to understand teachers' awareness, attitude and practices on MI in education in light to verbal/linguistic, logical/mathematical, interpersonal, bodily/ kinesthetic, visual/spatial, musical and naturalist intelligences in Dembi primary school of Illubabor Zone in Oromia Region. Intrapersonal intelligence is deliberately omitted to avoid any misconception between interpersonal and intrapersonal intelligences for they sometimes collectively described as personal or social emotional intelligences. I deliberately select and confine the study to Dembi primary school because of its accessibility. Here, the issue of qualitative research demands the researcher to make the detail observation of the natural setting and thorough communication which obviously requires sufficient time to carry out the research work.

1.7 The Limitation of the Study

The major limitation of the study was lack of conceptual delimitation in that attempts were made to treat seven markers of multiple intelligences. If the study had treated two or three variables it would have been better in depth.

1.8 Operational Definition of Terms

Multiple Intelligences (MI): incorporates the idea that learners have diverse aptitudes, natural strengths or a set of skills which they need to develop throughout their life and enable them to solve the genuine problem they face (Gardner, 1993).In this study it was seen in terms teachers views and commitments in valuing and nurturing students diverse natural strengths/aptitudes as fact of diverse population of students in the classroom.

MI in education: involves the idea of provision of more opportunities for individual students to learn via modalities, for children demonstrate different modes of learning/knowing by reflecting up on their intelligences (Gardner, 2004).

MI awareness: the act of showing or having perception on MI in education. In this study, it was seen in terms of teachers' values and myths toward implementing MI.

MI attitude: a predisposition to act in appositive or negative way toward the implementation of MI. In the study, it was seen in terms of views, values and commitments to provide multi-methodological experience for all students.

MI practices: the actual performance of teachers' classroom instruction from MI perspective. In this study it was seen in terms of:

1. Teachers' subject matter presentation practice from the perspective of MI.
2. Teachers' efforts to create conducive learning environment which connect learning experiences to students' natural strengths/aptitudes-intelligences.

CHAPTER TWO

2. Review of Related Literature

2.1 Multiple Intelligences (MI) Theory

Gardner (1993) proposed a view of natural human capabilities or natural strengths that is labeled as multiple intelligences, the diverse combinations of unique and individual intelligences that human have. Intelligences are raw, bio-psychological potential that work together in most individuals to solve problems. In relation to this point, Mulat and Janetius (2006: 120) stated that, "any individual can strengthen intelligence if she/he is well motivated, if ambient culture values that intelligence, if there are human and other resources available".

Accordingly, Gardner (1993: 12) suggests "it is of the utmost importance that we recognize and nurture all of the varied human intelligences and all of the combination of intelligences" and educators must consider multiple intelligence in the design of curriculum and instruction. In relation to this, "individual-centered curriculum would seek to match individuals not only to curricular areas but also to particular ways of teaching those subjects".

Mulat and Janetius (2006) state traditional psychologists think of intelligence as scholastic capacity that are important for success in school, whereas Gardner argues that intelligence is a set of skills/abilities that enables human being to solve problems or to make things which has value in at least one culture.

Gardner (1993: 8-9) posits seven ways in which human can be smart /intelligent as follows:

1. "Linguistic intelligence is the kind of ability exhibited in its fullest form, perhaps, by poets".
2. "Logical-mathematical intelligence, as the name implies is logical and mathematical ability, as well as scientific ability".

3. "Spatial intelligence is the ability to form a mental model of a spatial world and to be able to maneuver and operate using that model. This would include "Sailors, engineers, surgeons, sculptors, and painters …"
4. "Musical intelligence" is the ability that involves sensitivity to pitch, melody, rhythm, and tone.
5. "Bodily-kinesthetic intelligence is the ability to solve problems or to fashion products using one's whole body or parts of the body". This would be exemplified in "dancers, athletes, surgeons, and crafts people".
6. "Interpersonal intelligence is the ability to understand other people: What motivate them, how they work, how to work cooperatively with them". This might be exemplified in "Sales people, politicians, teachers, clinicians, and religious leaders."
7. "Intrapersonal intelligence … is a capacity to form an accurate, verdical model of one self and to be able to use that model to operate effectively in life".

Based on the formulation of Gardner, Cohen (2001:6) has considered the last two forms of "personal intelligences" of Gardner (1993:9) as "social emotional" intelligence which involves the abilities of "reading, decoding or understanding of others and ourselves." Furthermore, Arsido in Yohanis (2008: 8) described the verbal/linguistic and logical/mathematical intelligences as "analytic" intelligence which involves the capability of verbal/linguistic and logical/mathematical skills.

In the later years Gardner adds Naturalist intelligence to his original list of multiple intelligences (Gardner 1999, in Mulat and Janetius 2006). Naturalist intelligence is the ability to understand and organize the patterns of nature.

On the other hand, there are criticisms of Gardner's conceptualization of Multiple Intelligences from different views as follows:

1. Gardner's MI theory is not empirical; derived more strongly from his own intuition and reasoning than from a comprehensive and full grounding in empirical research (Smith, 2008). However, Gardner (2004: 109) claims:

> *MI theory is based wholly on empirical evidence. Any one who puts forth this critic can not have read frames of mind. Literally hundreds of empirical studies were reviewed in that book, and the actual intelligences were identified and delineated on the basis of empirical findings.*

According to Gardner (2004), MI theory is empirical and can be revised on the basis of new empirical findings. MI theory grows out of a conviction that standardized tests, with their almost exclusive stress on analytic (linguistic and logical) skills, are limited. In relation to this, Gardner, (2004: 108) states:

> *My concept of intelligences is an out growth of accumulating knowledge about the human brain and about human culture, not the result of prior definitions of test score analyses. As such it becomes that intelligences be assessed in ways that are 'intelligent fair', that is, in ways that examine the intelligence directly rather than through the lens of linguistic or logical intelligences (as ordinary paper and pencil tests do).*

Thus, MI theory involves assessment approach which is consistent with the view that there are a number of intelligences that are developed and can be detected-in culturally meaningful activities, "but there is no reason in principle why an 'intelligence fair' set of measures cannot be devised" (Gardner, 2004: 109).

2. MI theory is incompatible with standard intelligence theory, with hereditarian accounts, or with environmental accounts of the nature and causes of intelligence which is effectively measured by intelligence tests. MI theory is so broaden the notion of intelligence that it includes all psychological constructs and thus vitiates the usefulness, as well as the usual connotation of the term. There is an eight /or ninth or 10^{th} intelligence claimed as myth (Chapman 2008). These criticisms center on the Gardner's list of specific intelligences.

Regarding these criticisms, Gardner (2004:109-110) states:

> *MI theory is neutral on the question of hereditability of specific intelligences instead underscoring the centrality of genetic/ environmental interaction. Interest in IQ comes chiefly from those who are probing scholastic intelligence and those who traffic in the correlations between test scores. MI interest, obviously, centers on these intelligences and intellectual process that are not covered by IQ.*

In relation to this, the view of Gardner contrasts markedly with the view that intelligence is associated with the aptitudes of verbal/linguistic and/or logical/quantitative-analytic skills for problem solving. Heredity alone and environment alone can not produce intelligence. Their interaction does. In addition to the above, Gardner (2004: 110) suggests that:

> *It is the standard definition of intelligence that narrowly constrict our view, treating a certain form of scholastic performance as if it encompassed the range of human capacities and leading to disdain for those who happen not to be psychometrically bright. Moreover, I reject the distinction between talent and intelligence; in my view, that we call 'intelligence' in the vernacular is simply a certain set of 'talents' in the linguistic and/or logical mathematical spheres.*

Gardner (2004: 110) argues a treatment in terms of a number of semi-independent intelligences presents a more suitable conception of human thought than one that posits a single "bell curve" of intellect.

Despite these various criticisms of Gardner's conceptualization of multiple intelligences, it has been supported with a strongly positive response from many educators. In relation to this, Smith (2008) states:

> *MI has been embraced by a range of educational theorists and, significantly, applied by teachers and policy makers to the problem of schooling. It has helped a significant number of educators to question their work and to encourage them to look beyond the narrow confines of the dominant discourses of skill, curriculum and testing.*

Furthermore, Reed and Bergemann (1995) point out the recent conceptualization of Gardner's multiple intelligences has the potential to revolutionize the curriculum over the numerous twentieth century psychologists, who have contributed to the curriculum (most notably Benjamin and Bloom, who developed the concept of the cognitive domain). Regardless of one's theoretical perspective, the literature on MI provides a rich source of classroom ideas and can help teachers think about instruction in their classes in unique ways (Richards and Rodgers, 2001).

Therefore, to this end, based on the aforementioned arguments, we need to examine if and how school activities respond to such a theory, hence it suggests that individuals will have different learning styles, make different demands on teacher-mentors, "depending on what it is they are trying to learn and which of their multiple intelligences are most advanced or fully developed" (Gardner, 1993: 45).

2.2 The Importance of Implementing Multiple Intelligences (MI) in Education

The implementation of MI in schools encourage learning that goes beyond traditional books, pens, and pencil. Implementing MI which involves the provision of multi-sensory learning activities, calling upon learners' strength makes for an interesting, lively, and effective classroom for all students (Mulate and Janetius, 2006; Solomon, 2005; Hoerr, 2004; Nelson, 1998). In the MI classroom, the learners are given the opportunity to learn in a variety of ways, to discover their area of strength, to develop the full range of intelligences/capabilities and to become more successful learner in general.

Implementing MI enables learners to learn more using their particular strengths and to develop their strength and also to develop their weaknesses. Rather than simply relying on the linguistic and logical approach to learning, for not all pupils have the same abilities, not all of them learn in the same way (Gardner, 1993). Thus, implementing MI in education enables learners to benefit from instructional approaches by reflecting on their own learning.

When students learn in a variety of ways according to their aptitudes/strengths styles they will increase their response to the learning experience, which help them to learn more and to develop their weakness.

In relation to this Chapman (2008) states as:

> *A person, who is weak spatially and strong numerically, will be more likely to develop spatial ability if it is explained and developed by using numbers and logic. A person who is strong musically and weak numerically, will be more likely to develop numerical and logical skills through music, and not by being bombard by numbers alone.*

Implementing MI in education helps to develop learners' full range capacities, in other words develop the "Whole person" within each learner, which best serves the learner's learning requirements as well; in ways that more unifaceted approaches do not (Richards and Rodgers, 2001). In relation to this, Cohen (2001:18) states the importance of MI implementation as: "It helps students learn about various ways of solving problems-linguistically, artistically, kinesthetically, musically, visually, historically, mathematically, socially, emotionally, and naturally".

MI classroom is the one designed to support the development of the "whole child", helps students to develop their capacities more fully-not only intellectually, but also emotionally, socially and physically; learners are encouraged to see their goals in these broader terms.

Furthermore, MI gives teachers a basis to broaden their focus and conceptualization of learners' intelligence, which lead them to help students discover their own patterns of strengths and weakness. It helps teachers to identify the ways in which learners' exhibit intelligence and to teach using their particular strengths to help them learn.

MI aids teachers in creating more personalized and diversified instructional experience based on learners' natural strength to help them become empowered learners (Nelson, 1998; Hoerr, 2004).

Moreover, as Kornhaber (2001), quoted in Smith (2008), stated that:

> *MI provides educators with a conceptual framework for organizing and reflecting on curriculum assessment and pedagogical practice. In turn, this reflection has led many educators to develop new approaches that might better meet the needs of the range of learners in their classrooms.*

In relation to this, MI gives teachers a model to talk about how curriculum, instruction, and assessment could be designed to enable more students to succeed. Rather than simply relying on the linguistic approach to teaching, "presenting information in a test-retest format", teachers develop multi-sensory instruction and design assessment tools (Hoerr, 2004: 90).

2.3 Approaches in Implementing MI

2.3.1 Approaching a Concept or Subject Matter

Students differ in their learning capacities, preferences or natural strengths, in other words, not all students have the same aptitudes and learning styles (Gardner, 1993; Orlich et al. 2001; Daniel, 1994). Accordingly, teachers are needed to be aware of the diverse learners' capabilities to provide multi-sensory instructions to accommodate such differences among the learners in order to enhance learning rates and allow students to become thoroughly familiar with a concept or subject matter (Gardner, 2004; Multa and Janatius, 2006).

When a topic has been approached from a number of perspectives, four desirable outcomes ensue. First, because children do not all learn in the same way, more children will be reached. Second, students secure a sense of what it is like to be an expert when they behold that a teacher can represent knowledge in a number of different ways and discover that they themselves are also capable of more than a single representation of a specified content (Nelson, 1998). Third, since understanding can also be demonstrated in more than one way, a multi-methodological approach opens up the possibility that students can display their new understanding as well as their continuing difficulties in ways that are comfortable for them and accessible to others (Gardner, 2004). Finally, enables learners to develop their weaknesses and more fulfilled than a learner in traditional classroom (Daniel, 1994; Richards and Rodgers, 2001).

On the other hand, a mere transmission of knowledge from the teacher to the students does not ensure learning. As McCluskey et al. (2001), quoted in Yalew (2004:10) stated "if education is always to conceived along the same antiquated lines of a mere transmission of knowledge, there is little to be hoped from it in the bettering of man's future." In the same way, Yalew (2004: 18-19) states:

> *... an individual learns better and gets the most out of the total process of education, when education is meaningful to him/her and he/she values learning as well as when he/she actively participates in the learning process. Learning does not take place when the learner is a passive recipient of information presented by the teacher.*

Students learn at best, when they taught in a pluralistic approach according to their abilities or learning preferences. The concept of MI has been using to characterize the ways in which learners are unique and to develop instruction to respond to this uniqueness.

For this, teachers need to make inventory and identify learners' diverse capabilities in order to provide various learning activities to accommodate the diverse population of students.

In relation to this, Leazear (1992), in Orlich et al. (2001: 148); Christison (1997), in Richards and Rodgers (2001: 121) suggested activities and materials, which is reproduced in the table (2.1) below in which a particular intelligence is paired with possible resources usefull for working with this intelligence in the class.

Table 2.1 Multiple Intelligence Description and Related Activities which Enhances Particular Intelligences

Intelligence type	**Description of capabilities**	**Related activities**
Linguistic	Interpretation and explanation of ideas via language; Understanding relationship between communication and meaning; Creative writing; Telling stories/story creation; Analyzing own use of language; Understanding syntax and meaning of words.	Reading, Speaking, Creative Writing, Explaining, Memorizing, Verbal debate, Lecture,
Logical/ Mathematical	Logical thinking; Detecting abstract patterns; Scientific reasoning and deduction, Analyzing problems, Working with numbers, Understanding relationship between the cause and effect towards a tangible outcome. Performing complex calculations.	Logical-sequential presentation of subject matter. Working with patterns and relationships Abstract symbols/formulas Problem solving Scientific demonstration Calculation.

Visual /spatial	Interpretation and creation of visual images; Pictorial imagination and expression; Understanding relationship between images and meanings, and between space and effect. Representing something graphically.	Working with pictures and colors, drawings, visualizing, designing posters, Working with charts, illustrations, and graphic design.
Bodily/ kinesthetic	Body movement control; Manual dexterity, Physical agility and balance, Strong in crafts using tools. Improving body function Using mimetic ability Connecting mind and body	Hands-on activities, Field trips, Touch and talk, Role playing/dramatic enactment, Processing knowledge through bodily sensation.
Interpersonal	Understanding people Resolving conflicts, Interpretation of behavior and communication; Understanding the relationship between people and their situations, Creating and maintaining synergy Seeing things from others' perspectives.	Cooperative learning, Person to person communication, Group projects, peer teaching, Group brainstorming.
Intrapersonal	Awareness of self state of being, Understanding self, recognizing strength and weakness, Ability to work alone to pursue personal interests. Understanding self in relationship to others	Individualized project, Reflective learning, Independent studies Self teaching.
Naturalist	Understanding and organizing the patter of the nature Recognizing and classifying Fauna and Flora of an environment.	Conservation practice Nature encounters/field trip Nature observation Caring for plants and animals.
Musical	Sensing tonal qualities Being sensitive to sounds Creating melodies and rhythms Understanding the structure of music	Singing/Humming Melody Tonal pattern Rhythm Listening and to music

However, it seems impractical to necessarily approach every concept/ topic via eight different modalities; teachers need to be aware of children's diverse natural strength/intelligence to provide diverse learning experiences that are pedagogically appropriate for the topic at hand and to enhance individualized learning by providing out-of-class activities.

In implementing MI in education, the role of the teacher is very significant in providing students diverse approaches to learning to accommodate and evaluate students in terms of their strengths/ intelligences.

Accordingly Mulat and Janetius (2006:134) point out the role of teachers as:

> *By acknowledging each student's strong intelligences, teachers can motivate to succeed academically and socially. Moreover, school curriculum should be designed to satisfy the intellectual urge of the students , in other words, the approach has to be student- centered this is, not only to create interest in student in particular topic and ultimately but also allow the teacher to reach out to student s why may learn more optimal in different ways.*

In MI classroom teachers identify and recognize how students exhibit intelligence to provide diverse learning experience to accommodate them. Likewise, learners are typically expected to take an MI inventory and to develop their own MI profile (Richards and Rodgers, 2001). "The more awareness students have their own intelligence and how they work , the more they will know how to use that intelligence to access the necessary information and knowledge from the lesson" (Christison, 1997 in Richards and Rodgers, 2001:120). All of this is to enable learners to benefit from instructional approached by reflecting on their own learning. According to Richard and Rodgers (2001 :120), teachers then become "curriculum developers, lesson designers, analysts, activity finders or inventors, and most critically orchestrator of a rich array of multi-sensory activities with in the realistic constraints of time, space and resource of the classroom."

In relations to this, Hoerr (2004: 89) illustrates the difference between traditional and MI classroom, which is reproduced in table 2.2, below.

Table 2.2 Deference between traditional and MI classroom

In a traditional classroom	In an MI classroom
The kids with strong scholastic intelligences are smart and the other kids are not.	Everyone has a different profile of intelligences we are all smart in different ways.
Teachers create a hierarchy of intellect.	Teachers use all students' intelligences to help them learn.
The classroom is curriculum centered	The classroom is child-centered.
Teachers help students acquire information and facts.	Teachers help students to create meaning in constructive ways.
The focus is on the scholastic intelligences, the 3R's.	The personal intelligence is valued: Who you are is more important than what you know.
Teacher work from texts.	Teachers create curriculum, lesson units, and themes.
Teachers assess students by paper and pencil "objective" measures.	Teachers create assessment tools-project, exhibitions, Portfolios which incorporated MI
Teachers close the door and work in isolation	Teachers work with collcague in using MI developing collegiality.

In order to implement MI in classroom, "a teacher needs to take individual difference of students very seriously. Consider, how each students is different from one another, and help them apply their minds well" (Gardner 1993, in Mulat and Janetius, 2006:130). Therefore, teachers are expected to understand and be committed to implement MI in education.

2.3.2 Personalization of Education

Education works effectively for most individuals if the premises: "we are not all the same; we do not all have the same kind of minds", are taken into account rather than denied or ignored (Gardner, 2004: 112). Accordingly, the concept of MI used to catalyze personalized learning in schools. On the other hand, any uniform learning or education experience is likely to service only a minority of children (Amare, 1998).

Learners are not expected to think exactly alike in order to be right, as implied in traditional view of intelligence (Bruce and Meggitti, 1996). Rather, learners with interpersonal intelligence (socially intelligent) would be expected to excel in interpersonal ability given appropriate stimulation; those who have superior capacity in mathematics would be expected to do well given appropriate exposure to mathematics, hence through appropriate learning experiences, intelligence can be enhanced (Gardner, 1993; Mulat and Janetius, 2006). Learners are smart in different ways, in at least eight ways and when learning experience approached in light to learners' strengths, they are able to develop their capacities more and improve their weaker sides. In relation to this, based on the research result, Nelson (1998: 82) states: "In personalizing each student's education experience, I find that an increasing percentage of students discover their own strengths, put more effort into improving their weaker areas, and feel better about themselves". Moreover, Amare (2005) argues freeing students to learn according to their aptitudes enhances the quality of education.

Accordingly, in personalized learning differences among learners are taken seriously and MI activity centers/ areas, which provide students with the space, materials, time and challenging activities that spark deep involvement, are set up in schools in ways that afford each learner the maximum opportunity to work on intelligence foci of his/her own choosing (Nelson, 1998; Hoerr 2004). In another way as Nicholson- Nelson 1998 quoted in Richard and Rodgers (2001:119), described how MI can be used to individualize learning through project work as follows:

1. "Multiple intelligence projects: These are based on one or more of the intelligences and are designed to stimulate particular intelligences."
2. "Curriculum-based projects: These are based on curriculum content areas but are categorized according to the particular intelligences they make use of."
3. "Thematic-based projects: These are based on a theme from curriculum or classroom but are divided into different intelligences."
4. "Resource-based projects: These are designed to provide students with opportunities to research a topic using multiple intelligences."

5. "Student-choice projects: These are designed by students and draw on particular intelligences."

Therefore, teachers in implementing MI in education need to consider each of these possible applications of MI theory in light of their individual teaching situations.

2.4 Characteristics of Multiple Intelligence School

To develop out diverse capabilities of children Gardner (2004) underscores the responsibilities of educational institutions to engage each child's talents. When a child discovers at least one area of his/her strength in school then, he/she delight in pursuing an area of inherent skill and intrinsic interest (Campell et al. 1992). Therefore, schools should make commitment to develop the full range of children's intelligences through their programs which could serve to nurture the multi-faceted mind and to encourage natural giftedness.

In relation to this, Campell et al. (1992: 207-208) described the potential characteristics of elementary multiple intelligences schools as follows:

1. "The learning environment facilitates the development multiple intelligences."
2. "School staffs are committed to implement MI in education."
3. "Individual talents and interests of the students are identified and nurtured."
4. "Curricular offerings include multi-aged groupings so that students can observe others of varying abilities, and/or work with adults who have expertise in the disciplines being studied."
5. "Thematic units feature activities that extend from school to the home and community."
6. "Projects of personal relevance and community value comprise a significant portion of classroom curriculum."
7. "School programs alternate unstructured exploration of students' interests with intentional skill development."

Furthermore, Smith (2008) based on schools using MI in education has identified the following characteristics:

- "Culture: support for diverse learners and hard work. Acting on a value system which maintains that diverse students can learn and succeed that is learning exiting, and that hard work by teachers is necessary."

- "Readiness: awareness-building for implementing MI. Building staff awareness of MI and of the different ways that student learns."
- "Tool: MI is a means to foster high quality work. Using MI as a tool to promote high quality of student work rather than using the theory as an end and of itself."
- "Choice: meaningful curriculum and assessment options. Embedding curriculum and assessment in activities that are valued both by students and the wider culture."
- "Arts. Employing the arts to develop children's skill and understanding within and across disciplines. "

In light of this, to nurture the diverse learners and to develop out children multiple intelligences the schools should provide more opportunities out-of-class activities.

2.5 Multiple Intelligences (MI) Approach in Education in Ethiopia Context

New Education and Training Policy (NETP) (1994) advocated the learner-centered approach of teaching strategies to the goals of education like "understanding", the fullest development of learners' potential and the development of "all rounded" individuals who have the capabilities of creativity and problem solving.

In traditional teacher-centered, "didactic instruction" learning is viewed as an "information transmission process". Where teachers have necessary information students do not and teachers' lectures serve to move information into the heads of students (Derebssa, 2008: 125). The students made to be passive recipient of the information/ knowledge transmitted by teacher. In this model the teacher either wrote notes on the board which the student passively copied in their exercise books or students memorized the information from their text books.

In the teacher-centered approach students need to adhere to the defined rules and regulation of the school or classroom, focused "solely on building students' intellectual capacity, and ... on getting through the required curriculum". (Mccombs and Whisler, in Yalew, 2004: 24).

Furthermore, Mulat and Janetius (2006: 117) state the drawback of the non-learner-centered approach as:

> *The traditional teaching model has been criticized for not being responsive to students and is locked-down upon educationalists for not accommodating students' interests and abilities. It is true that this style fails to reach diverse student population and often tends to neglect active student participation in the classroom. It is possible to focus the teaching to the diverse population of students and tap their individual talents by the classroom management to make the class more fruitful, dynamic and productive to the learners.*

Therefore, as clearly pointed out in NETP (1994) to realize those goals of education and to improve the quality of education in the country there need to be a shift from the traditional teacher-dominated teaching approach to learner-centered approach. In learners-centered approach in education teachers provide an environment full of opportunities and materials with which students may choose to learn in their own styles. Implementing MI model in education and learning used to "suggest several alternative ways to transform a 'chalk and talk' classroom focused on traditional linguistic or logical ways of instruction into an active, effective, participatory classroom" (Mulat and Janetius, 2006: 125).

For this, NETP (1994) could be a framework for the implementation of MI in education, for it emphasizes on students' learning styles /preferred learning styles to engage every one in active learning process where each student advances at a rate worthy of his/her own ability and potential and teachers should develop diverse instructional strategies based on students diverse intelligences/aptitudes.

CHAPTER THREE

2. Methods of the Study

3.1 Methodological Approach

Qualitative research paradigm is an inquiry process of understanding a phenomenon by focusing on the total picture, rather than breaking it down into variables. The goal is a holistic picture and depth of understanding rather than numeric analysis of data (Ary et al. 2002). In other words, it seeks to understand social and human problem from the insider's perspective. It places emphasis on understanding through looking closely at people's words, actions and records. It examines the patterns of meaning which emerges from the data that are often presented in the participants own words. Thus qualitative researcher study issues in their natural settings, attempting to make sense or interpret phenomena in terms of the meaning people bring to them (Denzin and Lincolu, 1994).

This study therefore uses qualitative method of research that enables the researcher to study teachers' awareness, attitudes and practices on multiple intelligences in education at Dembi primary school. Lycompt and Pressle (1993) stressed this idea when they state that qualitative research can be use in educational research when the concern is with people because controlling and manipulating activities of human beings are some how difficult.

3.2 Design of the Study

According to Ary et al. (2002), a case study is a preferred strategy when the emphasis is on understanding of why the individual does, what he/she does and how behavior changes as the individual responds to the environment, when the investigator gathers data about the subjects present state, past experiences, environment and how these factors relate to one another and tries to discover all the variables that are important in the development of the subject. Since this study explores phenomenon in a context rather than specific variable, closely related issues to teachers awareness, attitude and practices on Multiple intelligence in education, a qualitative case study is thought to be appropriate Wiersman (1995) noted that a qualitative case study has focused on a few cases and many

variables that takes few research settings and makes detail explanations around and in the research setting. Yin (2003) also consider case study as an empirical inquiry that can be utilized to investigate a contemporary phenomenon within its life context. Yin further explained that the case study inquiry copes with the technically distinctive situation in which there will be many more variables of interest as one result relies on multiple sources of evidence with data needing to coverage in a triangulation fashion.

Moreover, Solomon (2004) writes that a qualitative case study is an analysis of a bound phenomenon such as a program, a person, or a process of implementation. According to this explanation, a case study usually refers to research that investigates a few cases, often just one in a considerable depth.

This research, therefore considered one research setting i.e. Dembi government primary school. Eight participant teachers were selected from both cycles. Four participant students were also selected from the second cycle of the primary grades (5-8), one student from each grade.

The school principal was one of the research participants involved in this study. Hence thirteen participants were involved in the entire course of the study. The study was carried out with an extensive review of the literature so as to develop a conceptual framework which is a necessary move in any research work followed by developing data gathering instruments and strategies of the research.

For successful accomplishment of the study I made frequent contacts with different peoples who were found to be important to get me preliminary information about well-informed participants for the entire study. Following this, data were collected, studied, organized and analyzed.

3.3 Data Collection Techniques

The most common data collection methods used in qualitative research are observation, recording (field notes) and interviewing (Ary et al. 2002). By selecting complementary methods, a researcher can cover the weakness of one method with the strength of another. Thus, a good qualitative case study will often include multiple methods of data collection

and it is recommended that no single source has a complete advantage over all the others (Solomon, 2004). Therefore data for this study have been gathered through observation, recording (field notes) and interview.

3.3.1 Observation

According to Merriam (1988), observation is a major means of collecting data in case study research. This means it gives a first hand account of the situation under study, when combined with interviews enhances the credibility of the phenomenon being investigated.

Hence, I used classroom observation as data collection instrument in the study along with interview and field notes document analysis. Observation were planned to be conducted in eight sections, each participant teacher in each section was observed according to the plan. It was an open observation in which I was recording all situations found to be relevant to the study using hand written notes. Through, the observation sessions I have been tried to record information as factual as possible focusing on two focal areas:

1 Teachers' practices in approaching a concept/subject matter implementing from MI point of view.
2 Teachers' effort to make classroom environment which connect learning experiences to diverse learners' aptitudes.

In this study as stated above the selected eight teachers were observed once in the classrooms when they present the lesson. The data obtained through observation presented in narrative form to describe events in order.

3.3.2 Recording (Field Notes)

The field notes contain the data that will be analyzed to provide an understanding of the research setting and the behavior of people within that setting (Ary et al. 2002). In a qualitative research, nearly all qualitative researchers produce field notes (Solomon, 2004).

Likewise, it did happen to me. Field notes were taken on issue valuable to the study in light of what has been seen and heard in school setting besides classroom observation. Accordingly, field notes were taken on the issue related to various posted written such as mission, vision and quoted quotations as well as the provision of opportunities which are determinant to the development of various skill in the school. Hence, I thoroughly

analyzed the entire school context in line with the theoretical frameworks of multiple intelligences in educational setting. In the study area for the overall data collection I stayed for a month.

3.3.3 Interview

Merriam (1988) explained that, in qualitative case studies, interviewing is a major sources of data needed for understanding the phenomenon under study. Accordingly, Ary et al. (2002) states interviews are used to gather data on subjects' opinions, beliefs, and feeling about situation in their own words.

In the course of this study I used semi structured interview in order to obtain valuable information about their understanding and feelings about implementing multiple intelligences in education, so as to relate to actual classroom practice. For this, I used three types of participants. These were teachers, students and school principal.
Accordingly, the interview was conducted with eight participant teachers. The interview has been conducted with each teacher after observation.

With the consent of the participants the interview was recorded through cassette recorder. This helped me to minimize loses of information during the interview process. Almost all interview questions were related to multiple intelligences awareness and attitude. Similarly, I interviewed four participant students. The interview questions to students were related to instruments for teachers' awareness, attitude and instructional practices. Moreover, I interviewed the school principal. The points of the interview were related to awareness and attitude of the school governance, about students' diverse natural strengths, the efforts of the school to serve students of diverse aptitudes/intelligences and the challenges and opportunities to execute multiple intelligences in education in the school.

3.4 Background of the School Setting

Dembi primary school is found in Oromia Region, Ilubabor zone and Dembi town of Dedessa woreda/district. Dembi is the rural town of Dedessa woreda which is found on the main road to Mattu which is the capital town of Ilubabor zone.

Dembi is located at 420km from Addis Ababa and 180 km from Mettu which is 600km away from Addis Ababa. The school is situated in an area of 19,680m^2. The school has seven blocks of which four blocks were built in 1961 E,C with the accommodation of vice director office, staff, store, pedagogical center and other supporting class with 10 classrooms. Two of the remained blocks were built in 1992 E.C consisting of four classrooms, principal office, and library and the last one was built in 1996 E.C which has 4 classrooms.

The school was serving the students of grades 1-4 and 5-8 in shifting system. There were 1796 students registered for 2001 E.C out of which 814 and 982 were males and females respectively. There was also 52 teaching staff out of which 23 are females and 29 are males.

The school is one of the six government primary schools (1-8) in Dedessa woreda/district. The school has been serving students from grade 1-4, who usually come from families of Dembi town and students from grade 5-8 who usually come from the town and six different neighbor kebeles.

Visions and Mission statements of Dembi primary school

Vision: Preparing students who have capability, of solving problem, disciplined, and dedicated to mother land and who take part to solve the problem of economic and societies.

Mission: Striving to provide a quality of education to all students without making any discrimination and preparing students who can satisfy the highest academic achievement.

3.4.1 Selection of Research Setting

As I have already mentioned, Dembi 1st and 2nd cycle primary school is one of the six government 1st and 2nd cycle primary schools in Dedessa woreda. Of these primary schools the selection of Dembi government primary school as a research setting is justified as follows:

a) It is found in the area of my work place so that, I could have easy access to visit the school over and over again which I think is required for a qualitative researcher. This helps me collect ample information needed to make more reliable and valid conclusion.

b) The school was serving as cluster resources center for others 2nd cycle primary schools in the woreda and it accommodates more experienced teachers who might have a better understanding of the behaviours of diverse students than any other primary schools in the woreda.

c) As high school teacher, and director, I had a close contact to the research setting for about 9 years and hence I have better access to different information and relatively good knowledge of the school than other schools in the woreda. This, therefore, contributes to obtain valuable information which ultimately enhances the quality of the study, because in a qualitative case study, the involvement of the researcher has paramount importance and essential as the primary data gatherer of the study at large.

3.4.2 Access to the Research Setting and Procedural Aspect

Following the approval of the research proposal and research instruments, I went to the research setting with letters of cooperation written by both the department of Curriculum and Teacher's Professional Development Studies and the Dedessa woreda/district education office. Accordingly, the permission was granted from the school principal.

The next step was to search for those research participants who could provide valuable information to the study. For this, I made prolonged discussion with the school principal, vice principal and unit leaders, on how to select well-informed participants. Though, this was so challenging, thanks to the relentless efforts made by the already mentioned individuals. I was able to select important research participants. The criteria for selection of teacher participants were their cooperation, professional competence, and responsibilities to participate in the study. Next, I carried face to face discussion with each of the selected participant teachers and the school principal. I briefed the objective of the study and eventually secured permission from all of them. Regarding selecting the students'

participants, I was supported by school director and a unit leader. They suggested four students from second cycle (5-8) each from specified grades based on their diverse capabilities in addition to academic skills and individual abilities of articulating ideas in the manner showing strength and confidences. I was convinced to select participant students from the second cycle (5-8) of primary grades because at this level students are presumably mentally matured to give their own opinion. I conducted a face to face discussion with each of the students at different times.

To overcome language barriers and to have common understanding and for the participants to express their feeling and ideas both Afan Oromo and Amharic languages were used as medium of communication.

3.5 Organization of Data

3.5.1 Transcription and Translation of Interviews

All the recorded interviews were transcribed word by word in Afan Oromo and Amharic and noted on a note book which is labeled by data, time, place, and pseudo names of the participants.

Translation

Data obtained by classroom observation and through interview where translated from Afan Oromo and Amharic into English and written down in another notebook that was labeled in the same way as the note book for transcription. The translation was done by both me and an assistant who is a first year master student in the department of foreign language.

3.5.2 Data Analysis

In my analysis, as I have already mentioned in the methodological part, data were obtained from observation, recording (field notes) and interview were described, interpreted and analyzed inductively from the outset of first observation or interview by reflecting on the meaning of what was seen or heard; developing hunches with attempts to confirm those hunches in the subsequent observation or interviews.

CHAPTER FOUR

4. Result and Discussion

The main objective of this study as indicated earlier is to investigate the awareness, attitude, and practices of teachers' toward multiple intelligence in education in Dembi primary school. Therefore, this chapter is devoted to reporting the data and my own interpretation thereof.

4.1 My First Day Experience

As it has been mentioned so far, I have used the overall school context as sources of data. Being eager as most beginners do, I arrived at the school early in the morning. It was too early for the other staff members to arrive there. I met a few students who were getting into the school compound and two school guards. I greeted them and I got into the school compound and started reading the quoted quotations line by line. The message of these quotations forced me to write down many of them. Some of those are read as follows:

- "Education is the base for all development."
- "School is the place of cultivating competent citizens."
- "Use your ability, 'talent' does not feel inferior."
- "A child miseducated is a child lost."

While I was recording the above quotations, school staff and a number of students were getting into the school. Some of the students wanted to know what I was doing. But, they simply pass by. Some others came near to me and tried to see what I was doing. Still other students were talking to each other by accompanying their chat with lovely laughter. With the completion of jotting down those quotations, I started observing the entire school environment by moving around. I found no more places or corner of activity centers or opportunity except a volley ball and a foot ball fields where students with diverse aptitude other than academic skill could participate to develop out their natural strength/ability to contribute to society by being able to do useful work that helps them earn a living. Therefore, I assumed to say the schooling system and context did not reflect the desired messages of the vision, mission and of the written quotations. Because it is not assumed to cultivate learners' diverse aptitudes or capabilities by confining them in

classrooms almost the whole school time and I was observing when the calculated time for recess and end of the class was reached and the students were coming out of the classes by running and shouting energetically as if classrooms are "jail". From this, one could say that the classroom instructional strategies being used might have not provided a variety of learning experience to accommodate the diverse students, not gave more opportunities to use and expand their preferred natural strength (intelligence) and the classroom situation might be socially emotionally stifling. Hence, my classroom observation and school context revealed too.

In relation to this, Gardner (2004) explained that, in the absence the provision of more opportunities to learn, to which learner participate according to their capabilities to develop discerning judgment rather than stifling students the whole school time in classrooms for subject matter acquisition reduce understanding to superficial thinking or factual memorization and limit the development of a set of skills to the ability of acquiring academic skills.

While I was observing the school environment, the bell was rung to announce the beginning of the first period. Since I had already fixed a program with the grade eight Biology teacher at first period (8:15, 19 Feb. 2009); he allowed me to go in and the description I made regarding to the observation is as follows.

4.2 Mixed Approach: "There was a Reflection to Come Out of Immersion"

As it was mentioned earlier, each teacher who was teaching different subjects was observed once. Hence, I convinced that discussing all the detailed performance of all the observed teachers with the readers might be tiresome repetitions. I have discussed the observation of four selected teachers to avoid such constraints.

I began the first classroom observation (at 8:15, 19 Feb. 2009) with grade eight Biology teachers and he politely invited me to go into his class. When I got in, all the learners stood up and greeted me to show their social relation, cultural respect to me. Responding to their greeting, I took a seat which enabled me to observe the physical settings of the classroom and interactions. I began my observation by examining the sitting arrangement

of the students. The chairs were arranged in line form and the students were sat in face to back manner. I could say that the sitting arrangement was not comfortable for group discussion. Inside the wall of the classroom building there was no any posted pictures or charts except the blackboard but the windows allow the room to get enough light and air. The Biology teacher started his teaching by revising the previous lesson about the formation of soil. While he was revising via explanation about the process in which soil was formed, he some times raised questions. However, only a few students frequently raised their hands to answer their questions and I realized that the teacher gave the chances of answering repeatedly to these students who frequently raised their hands and motivated them by saying "good" without involving most of the students to respond to the questions. Following the revision session the teacher moved to the day's topic-*Types of soil*. The teacher started his daily lesson by explaining the types of soil verbally and making notes. Of the points he wrote on the black board following by explanation some central points were translated as below:

> *Soils are classified in terms of their average particle size. Accordingly they classified as sand, silt, and clay. Sand particles range in diameter from 0.02 to 2mm. The spaces between these particles are very large water runs right through them, not able to retain water. Silt particles range in diameter from 0.002 to 0.02mm. They are medium sized soil particles and they can contain adequate water and air that are essential for plant growth. And this type of soil is good for agriculture. Clay particles are these soil particles which are less than 0.002mm in diameter. A soil with high clay content not drains very well because the spaces between the particles are very small. This type of soil particles is not good for plant growth.*

The teacher presented the topic solely through verbal transmission and reasoning. He failed to provide diverse learning experiences for example students to discuss about the soil particles they need, to bring these soil types to classroom and to observe as to which could retain water more, or less. While presentation the teacher some times raised questions and the same students who were responded during revision again raised their hands frequently and answered the questions. The teacher prized out those students who frequently answered his questions by not caring others despite their learning experiences. I had expected him to make the instruction learner centered beside linguistic and logical approach. Consequently, I began to think that as it happened to many teachers, the

traditional view of teaching approach might lead out him. This teacher has also committed another mistake. The teacher saw three students, two boys and one girl talking to each other while he (the teacher) was writing note on the blackboard. The students were sitting side by side. He shouted at them, and directly moved to them without asking what made them talk each other and identifying their learning preference he discourage them by making to stand up and sit down for three times. Moreover, he asked the rest of the students to respond for what made those students to talk. Immediately, two boy students who were repeatedly interacting with the teacher replied by saying "they are bored." On the top of this, the teacher warned them to keep quite and to write the note by telling them that they were known for their idleness by saying "I told you repeatedly to behave and be attentive."

Regardless of recognizing learners' diverse strengths and learning capacities, he was considering the diverse students uniformly through the lenses of linguistic and logical approach. Frankly speaking, these students did not commit a serious mistake that made the teacher so aggressive. In that very moment, I was forced to judge whether he was well acquainted with the practical principles of learner-centered approach. As to my knowledge multiple intelligence approach of teaching is a learner centered approach which enabled teachers to be problem solvers, to provide diverse learning experience to accommodate the diver students and to disconnect the chain of boss-servant approach between teachers and students. Therefore, when I analyzed the approach of the Biology teacher through the lenses of multiple intelligence approach, learner based ways of teaching I could say that he was using the traditional teaching methods.

However, the allotted time was over as I had done at the beginning of the class I thanked him and left the class.

According to my plan, the second classroom observation went to grade four English teachers. Accordingly, he invites me to observe the class in the fifth period (3:55, 23 Feb. 2009). Like the Biology teacher, this one also began his lesson by revising the previous topic. Here, again the English teacher forwarded various questions, and a few students who raised hands were asked frequently to answer the questions by ignoring others. Without participating a majority of students to the question he asked, he passed to the

day's lesson topic which was about the usage of *a, an, and some* in sentences, with the intention of covering the portion. He started the presentation of the day's lesson by explaining when to *use a, an, and some* in writing sentences and he wrote one sentence for each to show their usage in sentences as examples. Before he asked students to complete the incomplete sentences from their text book by using *a, an, and some,* he asked whether they understood or not; then a few students who were answering questions during revision responded that it was clear. With the responses of these students and without regarding the diverse students' learning styles he made students to read and answer questions from their text book individually by using *a*, *an* and *some*.

The same students who were participating from the very beginning of the class time were asked to answer repeatedly and motivated; and they secured a sense of "winners" while a majority of students were let to be passive and felt a sense of "losers". The classroom was not interactive, and instructional approach was unifaceted which did not accommodate the diverse students. When I saw the students sitting arrangement, I was expecting group discussion, for the students were forming groups. The sitting arrange of each group took a circular shape, which enabled students to see each other I could not reason out why students were allowed to sit in such away if they did not get chance to discuss with each other. In a self contained class where a single teacher teaches almost all of the subjects, teachers need to have the portfolios of learners' diverse aptitudes or learning preferences to plan and provide a variety of learning experience to met the needs of a wider range of learning styles. Not only in a self contained class but also in other classes I did not see most teachers planning and providing diverse learning experience for their students. When I came back to the English teacher, his teaching approach was not totally learner-centered. When he moved around each group to see how well students read the questions, he came with a student who was drawing a picture of house. The very moment he saw what this student was doing, he emotionally shouted at him, made him to stand up from his seat, and took him in front of the classroom students and disdains the learner's activity. With out identifying and recognizing the way in which the student exhibited his natural strength/ ability which encompass learning style, he warned him to stop such activities during lesson presentation and to behave by assuming all students learn and

think in the same way. Furthermore, he undermined and undervalued the student's activity by telling him that other activities other than being attentive to the transmission of subject matter and the ability of academic skills acquisition would not bring success in life.

Consequently, I began to think as it happened to many teachers, the view that developing the ability of academic skills and prizing academic excellence based on the test result of paper and pencil by the memorization of facts, which acquired verbally could enable a learner to solve problems he/she would encountered during his/her life time; and predicts success in life, might have shadowed his eyes to see many successful business-people artists and craftsmen who performed poorly in school. It might be the case that made him not to provide opportunities for individual learner to learn via modalities other than just verbal/linguistic task.

Without making the classroom environment which connect learning experiences to diverse students and to positive emotions eventually he went on writing the class-work on the board when he had been left with almost less than five minutes. Unfortunately before the teacher completed writing the class work the bell was rung, and I left the class bearing those memorable events in my heart.

My next plan was observing the Environmental Science teacher (at 2:20, 25 Feb. 2009) who taught grade three. The students were sitting in groups on a sitting arrangement which have a circular shape. The environmental teacher started her lesson by revising the previous topic. Here she raised some points of the previous topic and allowed the students to discuss in groups.

The students were motivated by showing smile face while they were made to discuss in groups and they continued the discussion. Meanwhile, the teacher was moving around each group to assess how well the students participated in the discussion. After some time the teacher made the students to stop the discussion and to answer the question. Almost all of the students raised their hands to respond but she gave a chance only for five students to answer the questions. Seemingly hurry to pass to the day's lesson she

appreciated the active participation of the students. Then she began to introduce the day's lesson topic-*conductors and insulators of electricity.*

The teacher explained the meaning of conductor and insulator by writing on the blackboard and gave examples. After she had explained, she brought different substances both conductors and insulators such as copper wires, aluminum and plastic rods.

She connected each side of these substances to the positive and negative signs of a battery to show that conductors give light with bulb while insulators do not. After she had performed and showed for the students, she distributed these materials to each group and gave them ample time to discuss with one another and learn via hands on activities. The students were motivated more and showed of smile face during which they made to practice in group what they heard and saw and started to experience the activity by talking with one another. While the students were continued experiencing the activity the teacher was moving around each group for checking whether each student in a group actively participated or not.

The teacher provided variety of instructional strategies-group discussion and hands on activities than verbal explanation in presenting the day's lesson topic to help students learn more (understand) and to help more students learn (reached), hence children do not all learn in the same way. Incorporating, multiple intelligences activities not necessarily eight ways, but in a variety of ways that prove pedagogically appropriate for the topic at hand in instructional approach help children to learn using their strength and to get them to understand the subject matter. It was because children demonstrate different modes of knowing and learning and different ways representing what they know (Gardner, 2004). Accordingly, the environmental science teacher provided a variety of learning experiences which could speak to learners' diverse aptitudes/strength, in approaching the topic using verbal transmission with reasoning, hands-on activities and group discussion which could excite students who are strong in verbal tasks (linguistic/logic), kinesthetic and pair work/cooperative learning, to learn more respectively. Based on the way the environmental science teacher, approached the topic, it could be said that, she was perceptive of learners' diverse learning preferences calling to her mind the diverse

aptitudes/ natural strengths of children. Hence through out my classroom observation I could not find any teacher in attempting to use variety of learning experiences to meet various learning styles, equally as her. Moreover, the classroom was interactive, and the students were encouraged to freely exchange their feelings and ideas safely which makes learning exciting and uses to build students' social/emotional experiences. Soon after the students had carried out group activity the teacher gave them class work from the textbook. The students took out their exercise book and began to work and after a while the teacher started to correct the given class work for these who finished by walking around groups. While she was correcting the class work, the bell was rung and I left the class with her. Since it was their recess time, we (the teacher and me) were accompanied by a number of students. While we were walking together first one boy and two girls came and shook the teacher's hand to greet and then they received the teaching materials with which she taught to express their respect to her and then until we arrived at the teachers' staff, about four boys and girls came to greet and to express their love to her I was surprised with her patience to respond to these different students' greeting and to relax them. Her motherly treatment made me to conceptualize that she was to develop social emotional realm of children

My fourth observation was arranged with grade eight Civic and Ethics (at 11:50, 27 Feb. 2009) teacher. I got into the class together with teacher. As usual after I took my seat, I began to observe the physical condition and interaction in the classroom. The teacher began his lesson by revising the previous topic. Here again the Civic and Ethics teacher forwarded various question; and students were trying to respond to these questions. After he had revised the previous topic, he explained the day's lesson topic- which was about *skills or profession*. The teacher having explained what is *skills or profession* he made the students to sit in groups and gave them ample time to discuss about the types of *skills or profession*. While the students were discussing, the teacher was encouraging students to actively participate in the discussion. After the students had carried out the discussion, the teacher wrote their response on the blackboard which is translated into English and written as below:

"Health, Engineering, Education, Sport, Agriculture, Lawyer, Music, Fine Art, Pottery, Journalism and Metal work"

And the teacher having appreciated the students for their active participation and response again he raised another question, whether these *skills or profession* were respected equally or not in a community. Following the question students began discussion actively being in groups.

After they carried out the group discussion, the students replied that these *skills or profession* did not have values as ability/strength equally. For example, by saying those who have a skill of pottery were assumed as they cast a spell with evil eye; which is used to disdain and discriminate against the skill of pottery. Furthermore, the students responded that the community as well as the school used to prize academic success without considering diverse capabilities and skills such as arts and crafts.

After the teacher accepted students' responses by nodding his head and honestly, he told them such notion of disdaining and undervaluing various *skills* in the community could reduce the creativity of children and limit the development of different skills that have value in community or society. The teacher aware the students to respect and not to undervalue any skills or abilities that add value to the personal growth and that have value in the culture. While he was concluding the lesson, he said to the students that they need to know their aptitudes/natural strengths first, and of others not to undermine and to respect and develop equally. Furthermore, he reminded his students that there would be a danger of ignoring the diverse skills of people. According to him failures in considering and respecting a set of skills equally, could held back the children not to develop out their natural strengths/capabilities.

Finally, he told to his students the school community and curriculum developers should considered learners' diverse aptitudes/strengths and not boiled down diverse aptitudes/strengths to the acquisition of academic skills, rather they need to make unrelenting effort to develop out the non academic skills too. The view of the Civic and Ethics teacher called to my mind the Chinese proverb "let a hundred flowers bloom". Therefore owing to Civic and Ethics teacher's view "there was a reflection to come out of immersion" to develop learners' multiple intelligence.

Be this as it may, by integrating my personal understanding with information that I have got from the observation I would like to show how the participants of the study understood the essence of multiple intelligences/aptitudes in education below.

4.3 Beyond the Horizons: To Enhance "Equality and Excellence" in Education

According to Mulat and Janetius (2006); Hoer (2004) in a learner centered classroom teachers should have knowledge about learner's diverse aptitudes /intelligences such as analytic(linguistic and logic), interpersonal (social), visual/spatial, bodily /kinesthetic, musical and naturalist which provide many indicators to identify preferred learning styles and professional commitment to provide educational experience in multidimensional way. Notwithstanding, in my entire interviews with teachers and principals what I had seen in evidence was that in most cases their awareness to diverse aptitude/natural strengths was differed but confined to limited elements of intelligence/aptitudes.

The question I raised to Dureti one of the participant teachers, was that if she had ever aware of learners' diversity in aptitude/natural strength that they were different in many ways while teaching. She responded as follows:

> *I understand the diverse aptitudes of my students. There are students who are sensitive to listening, reading & writing (verbal learning) and good at academic achievement. On the other hand, there are students who are sensitive to teamwork and strong in collaborative learning. Furthermore, when I was a student I remember one boy student who liked and attracted to manipulating objects and learn more when hands on learning experiences were provided. Accordingly I use various strategies to accommodate diverse learning preference and try to teach them in the way they can understand my lessons (25 Feb. 2009).*

I had seen that what she said, concerning the provision of diverse learning experience: explanation (verbal tasks), cooperative and hands-on activities to accommodate learner's learning preferences was true. In classroom observation the lesson topic was about conductors and insulators of electricity. First she explained verbally about the definition of conductors and insulators by giving the examples of substance as which is conductors and not. Accordingly after she had written and showed to students how it was done some examples of conductors and insulators on the black board then she made the students to

be in group and provided with substances like, copper wires, aluminum and plastic rods batteries and bulbs for hands-on activities to discuss together and touch and learn as which one of these substances give light in connection with batteries and bulbs. During this time all of the students were motivated and participated hotly.

In my interview with Dureti I have noticed that she understood students' diverse aptitudes/learning capacities though it is limited. In this case, therefore teachers need to identify how learners exhibit their natural abilities and learning styles and have to design multi-sensory experiences reach more students and to help students learn more.

In relation to this Richards and Rodgers (2001) state providing learning experiences in line to learners' natural strength enable them to learn more by reflecting on their strength.

I have raised the same question to another teacher participant, Ayantu, she said:

> *I very well know about students' diverse natural strengths. I understand their differences in terms of sensitivity to mathematical tasks/quantitative relation and clever in verbal acquisition of subject matter. On other hand, there are students who have remarkable skill in drawing and sensitive to concepts presented in figures/pictures. Accordingly, I give different drawing assignments other than verbal activities. I also know the student who makes different shapes by using his body. For example he writes numbers using his whole body. Moreover, I valued different students' capabilities (9 Mar. 2009).*

The response of the school principal, Alemu, was not different from the teacher participants. He said:

> *I clearly understand the diverse learners' strengths in terms of academic skill acquisition, music, sport and manipulating and using tools. To accommodate the diverse strengths of students in learning teachers were oriented to implement learner-centered approach. Moreover, to cultivate and strengthen the non academic skills for example, sports, we provided a volley ball and football fields and for other skills we are onwards to establish different clubs (12 Mar. 2009).*

In light to, Alemu's response what I found true in my school environment observation, there was volleyball and a football fields. However, he paid lip services regarding to the practice of learner-centered approach for in my classroom observation most teachers were using the "traditional" approach, transmission of subject matter, even they did not use cooperative learning.

I have also raised the same question to another teacher participant, Tsedalu. She said:

> *I very well know that students have diverse aptitudes. I understand in terms of the sensitivity to acquisition of academic skills, to manipulate and use tools as well as in terms of sensitivity for drawings and pictures. I consider those differences while the presentation of subject matter rather than discouraging and taking as a problem (3 Mar. 2009).*

In relation to this, she had strengthened her understanding of the diverse aptitudes among the learners by stating:

> *...I have two children a boy and a girl who are grade six and five respectively. The girl likes and sensitive to study, to carry out activities of text books and related activities well. Consequently, she stood second rank from the whole sections of grade six. In contrary, the boy does not like to read and perform activities of text books as well as he has no patient to attend classes. He likes o touch and talk and attracted to learn via hands-on activities (3 Mar. 2009).*

Throughout the interview sessions with all the research participants I had got almost similar responses in relation to their understanding of learner's diverse aptitudes/strengths. Most of them frequently mentioned their awareness about pupils' diverse aptitudes in terms of verbal/linguistic, logical/mathematical, kinesthetic, visual/spatial and interpersonal (social) aptitudes/skills. Most of them bypassed musical aptitudes and all of them did not state the aptitude associated with naturalist intelligences. I made informal conversation with all the participant teachers to identify why they could not able to plan and provide learning experience from the perspective of diverse children's aptitudes /natural strengths other than relying on linguistic approach to accommodate the diverse students and what I have understood was caused by the nature of the curriculum which prescribed what teachers to carry out with a limited range of activities which could not speak to the diverse students and by constraints of schooling system which made unrelenting effort on note writing, reading books and verbal information acquisition, which serves to postpone and depress children diverse aptitudes and learning capacities as well as by lack of training. However, the curricular bias in terms of instructional activities needs to be investigated.

Schools' deliberate omission of providing different learning experiences to nurture learners according to their aptitudes/natural abilities by largely emphasizing on classroom

sitting attendance for the acquisition of facts of subject matter, and teachers' reluctance to recognize diverse students' aptitudes and to provide learning experience according to learners' natural strength is not recommendable because students' expectations, interests, learning styles, and capacities vary greatly. Intelligence is a many-faceted phenomenon and schools that seek to cultivate diverse capabilities can do so only if they prize its many forms such as social skills, visual/spatial, kinesthetic and naturalist. Schools ought to recognize these differences and indeed glory in the variety rather than treating them as problems (Lazerson et al. 1985).

In relation to this, Nelson (1998) states school institutions should come out of the barriers to the full development of learners' capabilities/intelligences. Accordingly, school activities and educational experience would not be limited to transmission of factual knowledge of subject matter in classroom but also give place for development of multiple capabilities (Bruner, 1996). In light of this, school needs to provide multi-sensory activities or different activities that enable learners to reflect and act up on their natural abilities.

Accordingly, teachers' factual knowledge about diverse/multiple aptitudes/intelligences and its implication in the students learning should be complete. For the learning experience of each student depends upon his /her own learning capacities and we all have at least eight different intelligences which are associated with verbal/linguistic, logical/mathematical, bodily/kinesthetic, visual/spatial, intrapersonal interpersonal/social, musical and naturalist aptitudes which provides an indication to children's learning preferences (Gardner, 1999 in Orlich et al. 2001). Therefore, teachers need to make themselves aware of those different intelligences/aptitudes and broaden their horizons to nurture and not to depress by schooling as well as to provide multi-methodological experiences for all students, in other way round, to enhance "equality and excellence" in education.

The present empirical evidence does not seem to confirm this fact. Evidently, Zeleke one of the participant teachers, said:

> *I clearly understand the differences among the learners in education. For example, I know students who are strong in verbal/language and mathematical tasks as well as clever in subject matter acquisition. I also know students who are not active and sensitive to a transmission of subject matter but strong in sensing and feeling of others (social skill) and sensitive to cooperative learning. I try to accommodate those students who prefer cooperative learning by using group discussion/pair work (6 Mar. 2009).*

Similarly another participant teacher, Gutu said:

> *I understand diverse learners' aptitudes in the classroom. For example, I notice students who like and sensitive to draw different pictures during lesson transmission. While still, others behave differently, sensitive to touch one another and talk. I try to advise students with such odd behavior to behave and follow me. However, I do not think these learners' diverse characters are momentous for their learning (23 Feb. 2009).*

In my interview with Zeleke and Gutu, I have found out that their moment understanding of diverse aptitudes emanated from their commitments to cover portion and academic issues. Gutu told me that he gave due attention for academic matters that his focus on academic skill/issue via linguistic approach will result to students' success. Nevertheless, teachers' extreme devotion to cover potion which foster analytic skills (linguistic and logical) without considering the diverse learners' aptitudes/intelligences or learning preferences should not be resulted in students' success, under such conditions teachers deny learners' diverse natural strengths and seem to consider as all think in the same way that may push teachers to treat all at equal basis. It is hardly ideal to have to transmit knowledge in mass form, with diversity of students in the same room, each with his/her own strength and weakness, by confining them to desks, making them wait in lines, and making them behave in the same way (Nelson, 1998).

From the responses of the interviewees what I had found is that teachers' factual understanding of students' multiple aptitudes/intelligences was partial. Thus, teachers need to have factual knowledge about students' diverse natural strengths/learning capacities first. Failure of knowing and recognizing any of these markers of learners' diverse capacity, and failure of providing multi-methodological instructions that can

speak to the range of students may lead to the exclusion of any group or individual students from benefiting the lesson equally. Providing learning experiences in line with learner's natural strength/aptitude enables him/her to learn more.

It must be a failure in the true sense of using diverse natural strengths/intelligences in education. Evidently one of the participant students, Birtukan, responded to the question, if her teacher gave equal opportunities for all students during classroom interaction and as to which abilities of learners' is/are prized, she said:

> *In the teaching learning process, many teachers give recurrent chances to high achieving students to ask and answer questions they do not give these chances to other students. The ability of acquiring verbally transmitted information/ knowledge and to remember it is prized (17 Mar. 2009).*

However, according to Hoer (2004) it is important for all educators to know how all students learn and recognize their aptitudes/intelligences. They are expected to identify learners' diverse capabilities and their unique learning styles. Accordingly, they need to determine and provide appropriate learning experiences in order to help students learn more and develop and capitalize on their intelligences. In spite of the fact that, my interview with participant students evidenced that teachers used to ignore the multiple ways of being smart and the uniqueness of every individual student learning style. That was why the response of another participant student Lelisse, goes similar with Birtukan's ideas. Lelisse said, "Teaching learning favors high achieving students. It never balances at all" (19 Mar. 2009).

In my interview and observation what I have identified that teachers' awareness of learners' diverse natural strengths or learning experiences was limited and mostly focuses on verbal/linguistic and logical/mathematical tasks in light of transmitting academic skills/issues. In relation with this, one of the participant teachers, Tamiru said, "I know that student's diverse aptitudes in terms of the abilities of acquiring the transmission of subject matter knowledge as well as sensitivity social relation. But I focus on transmission of subject matter knowledge /academic issues" (19 Feb. 2009). Thus, the responses of Tamiru's and other participant teachers' understanding of learners' diverse aptitudes/learning capacities is emanated from the acquisition of analytic/academic skills

which favor verbal/linguistic and logical/mathematical aptitudes via a 'narrower' approach of verbal learning. As if, academic skills encompasses diverse capabilities and verbal/linguistic learning experiences accommodate the diverse learning capacities. Rather it accounts for the "shallow and narrow" learning. This seems to have underlain their narrow limit of horizons in light of the perception of children's' diverse aptitudes in relation to education. Limitation in teachers' awareness of learners' diverse aptitudes or learning capacities obviously leads to their failure to plan and implement appropriate teaching strategies and techniques that serve all learners equal and to nurture children's natural strengths/aptitudes.

Despite, teachers' extreme devotion to cover portion and academic skills, the New Education and Training Policy of Ethiopia (NETP) (1994) seek to prize and develop out many forms of capabilities. Accordingly the objectives of education and training policy of Ethiopia are to develop "all rounded" individuals: intellectually, socially, emotionally, physically and aesthetically. Nevertheless, this could not be done in classrooms that focus on a limited range of academic skills. It can not be done in classrooms that are boring, emotionally and intellectually stifling, or in which learning is a passive process (Campbell et al. 1992).

Accordingly, I have not observed any classroom teachers that she/he capable of prizing and using diverse capabilities as strength to aware learners to develop out their natural strengths or aptitudes and not to disdain aptitudes of others, equally except the Civic and Ethics education teacher. Most of the participant teachers in actual practice were not in position to present the lesson according to learners' diverse aptitudes/ learning experiences and to prize the diverse natural strengths other than academic success which foster the analytic (verbal/linguistic and logical/mathematical) skills.

4.4 "One Size Does Not Fit All": Multiple Intelligences Encompass Learning Capacity

Teachers' factual knowledge about learners' diverse natural strength must not be an end by itself; rather it must serves as a tool of learning channel to invest professional commitment to use students' multiple intelligences in education. Thus, teachers need to know how learner's natural strength influences and shapes all dimensions of learning. They should incorporate it in the teaching learning process, because when learners' aptitudes and experiences are understood and incorporated into instructional lessons the students will perform better academically (Nelson, 1998; Hoerr, 2004). Accordingly, Chapman (2008) states that the types of intelligence that a person possesses indicates not only a person's capabilities, but also the manner or method in which they prefer to learn and develop their strength-and also to develop their weakness.

In relation to this, teachers have to identify and recognize the diverse aptitudes of learners and introspect themselves to know what is their teaching methodology and how it could be improved in multidimensional way to accommodate the diverse students, rather than treating learners' multiple aptitudes as problem and antithetical to the expectations of their students and administrators.

To enable learners to benefit from instructional approaches by reflecting on their own aptitudes/intelligence, teachers should make special effort to understand the relationship between education and learners' diverse aptitudes/intelligences-verbal/linguistic, logical/mathematical, interpersonal/social, musical, visual/spatial, kinesthetic and naturalist intelligences.

Be this as it may, I raised question to Zeleke, one of the participant teachers that if he had ever realized that students' aptitudes would have been related with their education?
He responded as follows:

> *I understood that students' diverse aptitude is closely related with their education. I know students who have remarkable social skills and sensitive to pair work to learn cooperatively. Likewise, during lesson presentation in classroom most students prefer group work to competitive learning. Indeed while cooperative learning students engaged and motivated than individualized learning, however, not all but, some learn better through cooperative learning strategies than competitive learning through explanation (6 Mar. 2009).*

From the above quotation one can easily deduce that all students who prefer cooperative to competitive learning do not learn equally. According to Nelson (1998), students who are strong in social skills learn more through cooperative than competitive learning. These students who prefer cooperative learning though, they failed to learn more, I dare to say, is to alienate from emotional stifling classroom and verbal transmission of knowledge and hence students have the aptitudes of developing social skills.

In relation to this, Daniel (1994: 20) explains the sensitivity of children to develop social emotional skills and its implication for teachers as follows:

> *"ልጆች ለወደፊት ኑሮአቸው የሚያስፈልገውን የማህበራዊ ግንኙነት ስልት ለማዳበርና እርስ በርስ ለመማማር፣ ለመተዋወቅና ለማረዳዳት ካላቸው ፍላጎት የተነሳ የቡድን ስራ ዝንባሌ ያሳያሉ፡፡ ተማሪዎች በቡድን የመስራት ፍላጎት እንዳላቸው ከተገነዘብን የቡድን ሥራን ማቀድና ተግባራዊ ማድረግ ለትምህርቱ ውጤታማነት ያግዛል፡፡"*
>
> "Children show cooperative work tendency to develop their social relation skills which help them for future life. If we aware of the tendency of students to work in group, planning and implementing cooperative learning help for successful learning" (Translation).

Throughout my stay in the school particularly in all the interview sessions all the participant teachers and principal claim that most of the students do not like to stay and sit in the classroom and attentively listen to their teachers. Instead they would like to play with one another and consequently they are poor in their academic achievement.

Similarly, Kebede, one of the participant teachers said:

> *I understand that students' diverse aptitudes are closely related with their education. I personally know a student who like and sensitive to drawing while presentation of the subject matter knowledge. I perceived this student has the aptitude toward drawing and painting because he is good at designing and drawing different pictures, on different corner of the room or on laminated tine for different purpose. On the other hand, students who are sensitive to verbal tasks are more attentive to the transmission of subject matter knowledge and clever in acquiring academic skills (27 Feb. 2009).*

Accordingly, Gardner (1993) states that learners have multiple intelligences/natural strengths that helps them for learning and indicates the way through which they learn most and develop their weakness. In light of this, learners are viewed as possessing

individual learning styles, aptitudes or intelligences. Thus, pedagogy is most successful when these learner differences are acknowledged, analyzed for particular groups of learns, and accommodated in teaching.

Student who experienced different aptitudes other than the verbal acquisition of subject matter would become depressed because the teachers usually carries out the process of teaching learning via linguistic approach by ignoring others' learning capacities.
Thus, students who have diverse aptitude/natural strength or learning preference other than verbal and logical tasks become less attentive for their academic work which ultimately resulted in poor academic achievements.

In relation to this, Tagel, one of the participant students said:

> *In my part rightly, learners' learning capacity is connected with his/her natural strength/aptitude. For instance, I like and learn more when the teacher tries to present concepts of subject matter using figures than transmitting it verbally, for I am sensitive to drawings/pictures. Likewise, I like working with pictures and colors and I engaged in art activities. Therefore, for no opportunities where I used to develop my aptitude I do not like to attend classes (20, Mar. 2009).*

Furthermore, Anuwar strengthened the position of Tagel as:

> *In my opinion exactly, students learning experience is depend on his/her aptitude. However, teachers evaluate our learning capacity exclusively relying on verbal tasks which favor students who have the aptitude of language learning, and which used to marginalize students with diverse learning preferences. For example, I like to learn through hands on activities than verbal transmission of subject matter knowledge. If teacher uses hands on activities approaching the subject matter, I will learn more and exited in learning (20, Mar. 2009).*

Based on the above quotations Tagel and Anuwar realized that learners'aptitudes encompasses learning capacities. They depicted that natural strengths of students help as a bridge to communicate and learn more.

Similarly, throughout my interview with all participant students they were realized and recognized that learners' natural strengths help them to participate actively and to understand the knowledge of subject matter.

From the responses of interview students, Tagel and Anuwar, one can evidently understand that approaching diverse instructional strategies from multiple intelligence perspective enables students to motivate in learning, understand subject matter knowledge and to develop out their natural abilities. Accordingly, Chapman (2008) states the relation between one's natural strength/aptitude and education, as a person's strength is also a learning channel; a person's weakness is not a great learning channel. When we add in what we know about personal belief and confidence it all begins to make even more sense.

In contrast, failure regarding the of provision multi-sensory learning experiences to accommodate the diverse learning preferences and provision different activity centers/corners for learners to have chance to participate in line to their aptitudes and to develop out the skills students need through their live, makes not to develop interest in learning and stay in the school (Hoerr, 2004).

Moreover, the aformation discussion Faris, a participant teacher explains:

> *Rightly learners' diverse aptitude/ability is highly related to education activities. Students who are poor in verbal acquisition of subject matter and appear unmotivated-yet thrive outside of the classroom. I personally know a student who is 'under achiever' in academic success but has remarkable skills in repairing, manipulating and using tools. Likewise, he likes and sensitive to learn more on hands on activities than verbal explanation of facts (10, Mar. 2009).*

From the above opinion it could be said that the failure or winner and loser in classroom/school was based on the ability/strength of verbal acquisition of subject matter facts regardless of identifying and recognizing the diverse learning capacities of students. Thus teachers need not to label students as achiever and under achiever based on the mere verbal transmission of facts by considering all students could learn in the same way with out identifying how students learn more, hence they have different learning preferences reflecting on their intelligence. Under such condition the role of teachers is found to be significant by creating and providing learning experiences which help learners to learn equally, improve their weakness, and enhance their intelligences through "curriculum-based projects" (Nicholson-Nelson, 1998, in Richards and Rodgers, 2001: 119).

In other words, providing a teacher-directed rich mix of learning activities variously calling upon the diverse intelligences make for an interesting, lively, and effective classroom for all students.

Furthermore, I raised an interrelated question for the participant teachers. First to Ayantu, do you say that incorporating content, and instructional activities with an emphasis of developing multiple intelligences activities in school's program and in teaching learning process promotes diverse capabilities of students and there by improve their educational performance? She said:

> *Incorporating diverse children's aptitudes in schools' program help to nurture learners according to their natural strength, enables them to be smart in different ways to develop different skills that enables them to solve problem in various ways which help as input for the development of the country. Furthermore, integrating a variety of activities in content of teaching and planning diverse learning experiences help learners to learn through their strengths (2, Mar. 2009).*

Accordingly, providing various learning experiences in schools foster the development of "full range capacities" of students, socially, intellectually, visual/spatially, kinesthetically, musically and naturalist capacities hence appropriate learning experiences enhance intelligences and approaching a subject matter by using diverse learning experience/multiple intelligence activities meet the needs of a wider range of learning styles (Nelson, 1998; Mulat and Janetius, 2006; Hoer, 2004).

The essence of multiple intelligence activities in education is to plan multi-sensory learning experiences to accommodate students' learning preferences, to enable learners to capitalize and develop out their natural strength, and to develop the full range capacities of learners in ways that a more unifaceted approaches do not (Orlich et al. 2001; Gardner, 1993; Chapman, 2008).

Thus, in multiple intelligence classrooms, first, teachers could have to identify and recognize, make inventory and prepare different profile of diverse intelligences. Second, they need to provide multi-sensory learning experience to accommodate the diversity of students. Pedagogy that appeals to all the intelligences speaks to the "Whole person" in way" that traditional approaches do not. As a matter of fact it seems impractical for teachers to present the concept/subject matter via eight different modalities of learning

experiences in class duration of 40 minutes.

It is possible to approach subject matter in a variety of ways, not necessarily eight different ways, but in a number of ways that prove pedagogically appropriate for the topic at hand. Furthermore, to realize the participation/involvement of students to work alone or in pairs on intelligence foci of their own choosing by individualizing learning through project work could be used (Nicholson-Nelson 1998, in Richards and Rodgers 2001).

In relation to this, Solomon (2005: 81) states as:

"You don't necessarily have to teach or learn something in all eight ways, just see what the possibilities are, and then decide which particular pathways interest you the most, or seem to be the most effective teaching or learning tools."

For the same question, Tsedalu, a teacher participant, responded that:

> *Incorporating, various, learning experiences in the teaching learning process will improve the performance of all students. This is because it creates opportunity for students to learn in line to their learning styles and more children will be reached in such away that traditional approaches of transmission of subject matter do not (3, Mar. 2009).*

In my observation with all the participant teachers I have not seen teachers' efforts neither presenting the lesson from multiple intelligence perspective nor providing opportunities where students participate to strengthen their natural ability and improve their weaker areas. However, conceptually, the participant teachers have had a very good impression in the utilization of multiple intelligence approach to teaching for their students.

Quite interestingly, participant students are also do have the understanding of the importance of approaching a concept in multiple ways. For instance, Anuwar, a participant student, said:

"የመማር ምርጫችን የሚወሠነው በመምህሩ ነው:: በዝንባሌያችን አንባር ትምህርት ብቃርብልን እያንዳንዱ ተማሪ ጥሩ ውጤት ያስመዘግባል:: እንዲሁም በት/ቤት ውስጥ እንደዝንባሌያችን የምንሳተፍበት ምቹ ሁኔታ ቢኖር ከቀለም ትምህርት በተጨማሪ የተፈጥሮ ችሎታዎችንን እንድናሣድግ ይረዳናል" (17, Mar. 2009)::

Our learning preferences are determined by the teacher. If a subject matter is approached according to our aptitudes/ learning capacities each student registers good result likewise, if the school provides more opportunities where we participate according to our aptitudes, natural strength we could develop out or strengthen our natural strengths beside academic skills (Translation).

Put differently, participant students seemed to believe in the value of multiple intelligences in education for their academic success, though their learning preferences were limited by teachers.

In relation to this, Dureti, a teacher participant, said:

During the classroom teaching-learning process, I think it is very useful to recognize learners' diverse aptitudes and foster them to learn according to their preferences, rather than assuming it as burden. If that be the case, then every body will equally participate in the process to enjoy better performance (25 Feb. 2009).

Furthermore, Kebede valued multiple intelligences in education. He said:

Practicing multiple intelligences in education has paramount importance to enable students to be intelligent in different ways. Teachers should raise different strengths and talk about them. When I teach, I tell students that although having strong academic skills is important, it is not the only predictor of success in life. For instance, I discuss famous people, such as Albert Einstein, who performed poorly in school but were smart in other ways (27 Feb. 2009).

From the participants opinion it could be said that the implementation of multiple intelligence in education help learners to conceptualize multiple ways of being intelligent/smart, discover their strengths and use in learning, and capable of growth in all areas.

Through out my interview with all the participant teachers their awareness and insights about multiple intelligences was not simple and they discussed it in impression.

They had been able to raise different issues in relation to learners; learning capacities in connection with their natural strength/aptitude which are related to multiple intelligences model proposed in general education. Therefore teachers need to provide varieties of learning strategies that speak to diversity of students, in ways that a more unifacted approaches do not; hence "one size does not fit all."

4.5 Sympathy for Implementation of Multiple Intelligences in Education

Instructional activities cannot be facilitated in the absence of a clear understanding of how to provide classroom instruction from the learners' diverse aptitudes/intelligences points of views (Mulat and Janetius, 2006). Hence, a classroom with instructional process unaware of and insensitive to learners' diverse capabilities/intelligences or with essentially emphasizing on linguistic approach (verbal transmission of knowledge) could negatively affect students whose learning preferences and natural strengths are different from the one being stressed, and learning for "understanding" (Gardner, 2004). Thus it is crucial issue for teachers to prepare each class lesson in a variety of ways that prove pedagogically appropriate for the topic at hand and present it according to students' diverse learning capacities to serve equally all students in the classroom. The provision of diversified learning experiences that speak to a range of students creates in the minds of students a sense of recognition and belongingness (Nelson, 1998). They can equally strive or better academic achievements and they secure a sense of experts. Accordingly, Tamiru, a participant teacher, said:

> *If the text book is not voluminous and leave the room for teachers' and learners' creativity, teachers will have time to provide a variety of learning experiences according to learners' diverse aptitudes to foster better understanding, rather than emphasizing on transmitting the concept verbally to cover portion. Then students will perform better (19 Feb. 2009).*

Tamiru's response clearly shows that text books being voluminous obligate teachers to present the content verbally to cover the portion by reducing learning experiences to verbal acquisition of information. In relation to this, Mulat and Janetius (2006) states: since broad coverage ensures superficiality, curriculum should go with the principle "Less is more" (129).

Furthermore, Zeleke, a participant teacher suggested that:

> *It is possible to use cooperative group, verbal/linguistic and hands-on activities learning experiences during the class hour of 40 minute and other could be used by providing different project activities from the text book which would foster their divers learning preferences and aptitudes (6, Mar. 2009).*

Put differently, both participant teachers indicated the content intended to be taught in the class hour of 40 minute does not covered if it is taught in multimethodological approach which accommodate wider range of learners' aptitude/natural strength. So, in light of this, one could say that the syllabi are in favour of "verbal acquisition" of knowledge. Besides time constraints to provide multisensory instruction in classroom, Zeleke, forwarded the possibility of making individualized learning by providing different projects according to learners' learning capacities based on curriculum content.

Another, participant teachers Kebede, said:

> *It is possible to develop out non academic capacities such as arts and crafts skills by providing various activity centers/areas with materials and time where they participate according to their aptitudes, rather than crowding them in classrooms the whole school time to wait for teachers one after another for presentation (27, Feb. 2009).*

Appropriate learning experiences enhance intelligences (Gardner, 1993) and accordingly, schools need to provide various and appropriate activities in addition to academic skills which engage learners to participate according to their aptitudes and to develop out their intelligence experientially.

In other words, it is impossible to develop out plurality of excellences- intellectual, social, physical and aesthetical capacity in school by stifling students in classroom setting for the acquisition of verbal information/knowledge.

In other way, Ayantu, teacher participant, also said:

"As to me, aesthetic education is the most appropriate discipline to implement MI in the schools. The subject by its curricular nature gives room for different learners' aptitudes."

What is true is, she is a aesthetic education teacher, currently teaching in grade one, and she found the subject the most appropriate subject which enable students to reflect some of their aptitudes.

In my interview with Ayantu what I have understood that she did not see other subjects as appropriate as aesthetic.

On other hand, Duretti another participant teacher, brought the possibility and inclusion of MI activities across all subjects to help students create meaning in a constructivist way.

However, there were participant teachers who doubted the actual implementation of MI activities in the school's programs and the teaching learning processes. These teachers see it, as a very different task for teachers to practice it, though; scholars say MI in education enables teachers to provide more inclusive instruction and curriculum for the equity of education.

But, Gutu said: "it is possible to include MI activities in the teaching learning process but it demands teachers' very careful lesson preparation, it could not be an easy task". In general the participant teachers seemed afraid of the actual implementation of MI in education.

The fear might have emanated from the notion that any new practice meant adding another task on teachers which they dislike at all. In reality, MI is not intended to add burden on teachers. Rather it revealed away to help more students learn and to help students learn more. It is a means to make the curriculum and instruction for more inclusive of varied learning styles to accommodate the diverse learning capacities of students; to make the students academically competent and to secure a sense of expert rather than simply relying on the linguistic tasks. On the top of all these, however, in the course of this study I have informally talked with these teachers. From the conversation what I have identified that the truth of their fear was not the issue of adding burdens but, they do consider learners' diverse aptitudes a very complex task and time taking to make use in teaching learning process and the schools programs.

In relation to this, Nelson (1998) states students have diverse capabilities and potential that extends far beyond traditional methods of assessment. A student who registers poor academic achievement could easily be an excellent leader, sports man, craftsman, musician, or visual artist. Thus, to develop out plurality of excellence or diverse problem solving abilities schools should prize and promote the vast range of capabilities that have a value in life, rather than emphasizing usually on the verbal acquisition of academic skills as if it encompasses the range of human capacities. For this, teachers must believe that learners' natural strengths or aptitudes provide an indication tc their preferred learning styles; and developing a students' strengths will increase their response to learning experience; and the aptitudes that deviate from analytic (linguistic and logical), are treated as deficit must be eliminated (Hoer, 2004).

In my interview with all the participant teachers what I had seen in evidence that all of them did not consider difference as deficit. But they see it as a sign of diverse capabilities which enable them to contribute values. In this regard, Kebede's responses inform us that the strength of teachers' attitudes as follows:

> *What ever learners' divers' aptitudes /natural strengths, not only the aptitudes associated with language/qualitative relations but also visual arts, sports, crafts, social relation skills all serve the purpose equally. All these and all others aptitudes could not disclaim the ability of acquiring academic skills in education. So, I believe learners' diverse aptitudes enables them to be expert in their own way (27 Feb. 2009).*

Supporting, Kebede's position, Faris said:

> *Failurity in the verbal acquisition of academic successes could not imply some one is good or not in his/her life career. For example, there was one student who dropped out from grade seven due to academic failure, but now he is well known salesman, have good social skill and lives successful life (10,. Mar. 2009).*

Put differently, both Kebede and Faris responded exclusively depending on the aptitudes usually associated with verbal/linguistic or logical/mathematical skills is not recommended to label kids generally as smart/intelligent or not, because no one will be good for nothing and every one will be excellent at some thing. For this, teachers need to identify and recognize learners' diverse aptitudes/natural strengths on which learning experiences are based to provide multidimensional learning experiences to accommodate

the diverse students, rather than disdain them.

Nevertheless, the teachers repeatedly mentioned that conditions for all students were not equally fulfilled. According to them the inequalities that happened to students is due to the inabilities of school programs and curricular biases from the perspective of diverse children aptitudes as well as teacher failure to perceive the diverse aptitudes and its influence in one's learning. Although, they did not deny that there could be a lot of things to be taken into account to one's academic achievement, they believed that one can be successful if his/her natural strength is recognized and incorporated in the teaching learning process. If so, all students regardless of their differences can learn and perform better and develop their abilities/intelligences.

Furthermore, the participant teachers believed that multiple intelligences activities in education has motivational effects upon students' learning.

For instance, Dureti explains that:

> *I believe making students to learn according to their aptitudes in schools can motivate students. For instance, failure in verbal acquisition academic skills does not mean that he/she is not smart or has no the ability to learn. So, if teachers recognize and use learners' diverse strengths/learning capacities in education equally one can develop a sense of expert and improve his/her academic achievement (25 Feb. 2009).*

Accordingly, Solomon (2005); Mulat and Janetius, (2006) state that teachers knowledge of multiple intelligences of students develops respect for learners' diverse aptitudes and enhances their teaching skills and strategies enabling them to use wisely diverse learning experiences in the classroom, hence any uniform educational approach is likely to serve a minority of children. Thus, teachers' preparation and presentation of lesson from multiple intelligence perspectives have two told advantage. First, it helps teachers to have varieties of resources for teaching. Second the incorporation of multiple intelligence activities in the teaching learning process motivates all the learners to learn, motivates all the learners to learn in light to their learning preferences and to cultivate learners' multiple intelligence.

The attitude of Ayantu particularly elaborated these ideas as follows:

> *Incorporating MI activities in schools' program and providing instruction from this perspective motivates and engage learners to learning. Rather than usually stifling students in the classroom and relying on the scores of academic success/achievement to gauge learners' capabilities. I see this particularly when I teach aesthetic education. Students were motivated during aesthetic class because it incorporates different activities-sports, music and crafts that encompass some of learners' diverse aptitudes and let them participate according to their aptitude (2 Mar. 2009).*

Thus, the response of these participant teachers was clearly evidenced that they have desirable attitudes to teach students according to their aptitudes/learning capacities. These attitudes obviously enables the teachers to create a classroom atmosphere which is interactive, that will allow all students work together and understand and appreciate their own natural strength/aptitudes and the strength of others.

Therefore, in the classroom of diverse student population attitude of the teachers is detrimental to provide multi-sensory learning experiences to accommodate the diver students; in ways that a more unitary approaches do not. In this regard all the participant teachers have agreed the crucial roles teachers play against labeling kids as smart or not based on the ability of verbally transmitted knowledge.

From the points of views of the interviewees, I came to realize that the opinion of all the teacher participants evidenced that the role of teachers' desirable attitudes towards multiple intelligences/aptitudes of students infighting discrimination against any children's diverse aptitudes by schooling. To see the degree how opinions are similar here I better present the Amharic version of Tsedalu's responses believing that the translation could not be as strong as the original response language to express one's feeling.

Tsedalu, a participant teacher explained that:

> *"በእኔ ግምት የተማሪዎችን ዝንባሌ ተገንዝቦ በዚሁ መሠረት የትምህርት ሥራን ማመቻቸት አንድ ሐኪም የታመመን ሰው መርምሮ ትክክለኛ መድኃኒት እንደሚያዝ ነው። ስለዚህ አንድ ተማሪ በዝንባሌው መሠረት እንዲማር ማድረግ ት/ቱን የበለጠ እንዲረዳ እና የበታችነት ስሜት እንዳይሰማት/ው ይረዳል (3 Mar. 2009):::"*

In my opinion being aware of learners' natural strength/aptitude and providing learning experiences accordingly is useful as prescription of appropriate medicine for a patient by physician. So, empowering students to learn according to his/her strengths helps him/her to learn more 'understand' and to not feel inferior (Translation).

Kebede's position was not different from Tsedalu's idea. He strongly relied on provision of multi-sensory learning experiences and more opportunities in the school, where students participate rather than usually confining students in the classroom. He said:

"In the process of education confining children in classroom and boiling down children's diverse aptitude to verbal learning/tasks could be inimical for the pursuit of developing all rounded and competent individual" (27 Feb. 2009).

Further more, he stated the difficulty of developing out learners' diverse capabilities such as crafts and arts in the absence of more opportunities in the school, where students participate and capitalize on their aptitude as impossible to happen by saying "ላም ባልዋለበት ኩበት ለቀማ" meaning that to search for dung where cows do not present. From kebede's response one could understand his strong belief towards the implementation of multiple intelligences in education to nurture students according to their aptitudes/natural strengths and to develop their multiple intelligences.

Thus, participant teachers all the way not only believe in planning diversified instructional strategies that can speak to the range of students' abilities in ways that they could learn more, and importance of identifying and recognizing learners' learning preferences calling upon their natural strengths, but also underline the value of providing more opportunities in the school to cultivate diverse capabilities. Due to this, the participant teachers all said that to teach different students we must take seriously the diverse students' aptitudes into consideration, and value in other than alienate them focusing on verbal tasks for subject matter acquisition being legitimized by precedents; if we want to implement multiple intelligences in education to enhance understanding and to cultivate desired skills and capabilities that have value in the country.

CHAPTER FIVE

5. Conclusion and Implication

5.1 Conclusions

In this chapter attempt is made to present conclusions and implication of the study

- The study came up with the conclusion that teachers' awareness towards multiple intelligences (MI) in education is encouraging. Nevertheless, it is limited and confined to certain indicators of multiple intelligences. Teachers have had good understanding of students' diverse aptitude/strength in terms of verbal/linguistic, logical/mathematical, bodily/kinesthetic, interpersonal/social and visual/spatial intelligences. However, teachers showed reservation to express their level of understanding about musical intelligence in relation to education and bypassed naturalist intelligence. Apart from expressing their understanding towards certain indicators of multiple intelligences in education as specified above, most teachers have not been planning and providing multi-sensory learning experiences in approaching a subject matter to accommodate the diverse students. The reasons of their omission of diverse learning experiences were: (1) the nature of the syllabi which prescribe what the teachers do with a limited ranges of activities and the textbooks were voluminous which favor transmission of knowledge verbally; however, in relation to curriculum instructional bias, from the perspective of MI needs further investigations, (2) the constraints of schooling system which made usually unrelenting effort to information acquisition in classrooms, rather than providing more opportunities for children to learn or demonstrate what they learn/know in the way they like, and (3) lack of training.
- The study also revealed that teachers have desirable attitude toward multiple intelligence approach in education. They all agreed that different in aptitude a sign of mind's multifaceted problem solving capacity beyond analytic (linguistic and logical) ability which enable teachers and learners to use multiple intelligence activities as a channel of learning to accommodate diverse learning capacities and enable students to develop out and capitalize on their natural strength/intelligences.

- The study also disclosed that teachers' lesson presentation practices are not encouraging, though that doesn't mean it is none existent. For instance, however, teachers' effort in utilizing a variety of learning experiences to enable learners to understand the subject matter and to reach more students is very low. The reason for this was that teachers usually focus on verbal and logical tasks for the transmission of the content of the text books and hurry for portion coverage than trying to provide diverse instructional strategies which speak to a wider learning style of students. Consequently, students whose learning styles/ aptitudes were other than linguistic and logical experiences could not be reached, not excited and would be disadvantaged. Teachers' failure to employ diverse instructional techniques resulted from their lack of training in the higher institution to teach students of diverse learning experiences/aptitudes.
- The study also revealed that teachers' effort to connect learning experiences to positive emotions is not encouraging. Students who did not excited by verbal transmission and found experiencing other activities were discouraged as those activities underlain their idleness rather than identifying how more children could learn and making learning exciting. Consequently, the teachers were making the classroom atmosphere boring and emotionally stifling. Teachers mostly follow the paces of high achieving students by this; they turned down the diverse learning capacities of children.
- The study also disclosed teachers' effort to create conducive classroom environment or more opportunities/activity corners where learners to use and expand their preferred intelligences bypassed. Consequently, students whose aptitudes/strengths were postponed did not like to attend the class.

5.2 Implication

- It is found important to enhance teachers' understanding of students' multiple intelligences through seminars or workshops. Or, most importantly, it is recommendable to incorporate multiple intelligence activities in curriculum and instruction to make more inclusive of varied learning experience, for children demonstrate/ exhibit different modes of knowing/learning and different ways of expressing what they understand. Further more, to give ample opportunities for children to use and expand their preferred intelligences as well as adapt to and develop the other intelligences likewise, it is found important to inject various project and experiential activities as integral part of learning to give opportunity for pupils to apply what they know /learn in either useful or interesting areas which would be the responsibility of regional curriculum developers. For the successful implementation of multiple intelligence in education in primary schools all teachers must be trained or receive on job training. Since, implementing multiple intelligences in education requires reforms of school programs awareness creation trainings, thus have crucial role in supporting staff of the school.
- There is good base for the school to practice multiple intelligence activities because as this study found out that teachers already have developed desirable attitude toward multiple intelligences in education. Moreover, in a broad sense, desirable attitude toward multiple intelligences in education could be a base for Regional Education Bureau to incorporate multiple intelligence activities into the curriculum and instruction to make far more inclusive. Although, the findings of this study does not by it self a guarantee to make general conclusion; about teachers attitude all over the region, it does give a clue and provides a window of opportunities to make region/nation wise educational investigation some time in the future so as to draw a whole sum regional/ national picture as far as teachers attitude toward multiple intelligence in education is concerned.

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Appendix-1

Consent from Research participants

የትምህርት ቤቱ ሥም ----------

ጥናቱን የሚያካሂደው ሠው ----------

የጥናቱ ርዕስ፡ በኢሉባቡር ዞን ውስጥ የደምቢ የመጀመሪያ ደረጃ ትምህርት ቤት የሚገኙ መምህራን የተለያዩ የተማሪዎችን ዝንባሌ/የተፈጥሮ ጥንካሬ/ ችሎታ ባማከለ መልኩ ትምህርትን መስጠት በተመለከተ መምህራን ያላቸውን ግንዛቤና አመለካከት ማጥናት።

የጥናቱ ተሳታፊዎች፡ በደምቢ የመጀመሪያ ደረጃ ትምህርት ቤት የሚገኙ መምህራን፣ ተማሪዎች እና የትምህርት ቤቱ ርዕሰ መምህር ::

ከሁሉ አስቀድሜ ለማካሄድ ጥናት መሳካት ተሳታፊ ለመሆን ፈቃድዎ በመሆኑ ምስጋናዬን እያረብኩ ይህ ቅፅ የጥናቱን መሠረታዊ አላማዎች እና እንደ ተሣታፊ የእርስዎን አስተዋፅኦና በሁሉም የጥናቱ ጊዜያት ላከብርልዎት የሚገቡትን መብቶችዎን በዝርዝር የያዘ ነው።

የእርስዎ በፈቃደኝነት ለመሣተፍ በወሠኑት ጥናት ላይ በሚሳተፉበት ወቅት የሚከተሉትን አስተዋፅኦ እንዲያደርጉ ይጠበቃል።

1. ቢያንስ ለአንድ ክፍለ ጊዜ የክፍል ውስጥ ምልከታን መተባበር፣
2. በተጨማሪ ቢያንስ ለአንድ ጊዜ ለቃለ መጠይቅ ትብብር ማድረግ

የጥናቱ ዓላማዎች

1. የሀሉንም ተማዎች ዝንባሌ /የተፈጥሮ ጥንካሬ/ችሎታ(multiple intelligences) የማከል ትምህርት አስፈላጊነትና በተጨባጭ ለዚሁ መሠረት ሊሆኑ የሚችሉ ተስፋ ሰጪ ጉዳዮችን ከመረዳት አንፃር በደምቢ አንደኛ ደረጃ ትምህርት ቤት መምህራን በጉዳዩ ላይ ያላቸውን አመለካከት እንዲሁም ግንዛቤዎቻቸውን ነቅሶ ማሳየት፣

2. በደምቢ የመጀመሪያ ደረጃ ትምህርት ቤት የሚገኙ መምህራን ለሁሉም ተማሪዎች በሚጠቅም መልኩ በምን መልኩና ሁኔታ የማስተማር ዘዴዎችን ያዘጋጁና ይጠቀሙ መሆኑን ለመግለፅ፣
3. ጥናቱን በማካሄድ በጥናቱ ርዕስ ላይ እስካሁን ከሚታወቀው እሳቤ ላይ ተጨማሪ የእውቀት አስተዋፅኦ ማድረግ።

ጥናቱን በማካሄድ ሂደት ከዚህ የሚከተሉትን ሁሉ ለማሟላት ዝግጁነቱን አረጋግጣለሁ።

1. ለዚህ ጥናት የሚያስፈልጉ መረጃዎችን ለማሰባሰብም ሆነ የጥናቱን ፅሁፍ በማዘጋጀት ሂደት ለእርስዎ ደህንነት ሲባል የእርስዎን ስም ሳይሆን የሽፋን ስም የሚጠቀም መሆኑን፣
2. በቃለ መጠይቅ ወቅት ድምፅዎን በቴፕሪከርደር እንድቀርፅ ፈቃደኛ ከሆኑ ለዚህ ጥናት ጥቅም ብቻ ከማዋል በስተቀር ለማንም አሣልፌ የማላሰማ ሲሆን ሚስጥርዎን ሙሉ በሙሉ የምጠብቅ መሆኑን፣
3. በዚህ ጥናት ውስጥ ተሳታፊ የሚሆኑት በእርስዎ ሙሉ ፈቃድ እንደመሆኑ መጠን በፈለጉ ሰዓት በማንኛውም ምክንያት ከተሳታፊነት እራስዎን ማግለል የሚችሉ መሆኑን አረጋግጣለሁ።

ከላይ በተዘረዘሩት ጉዳዮች ሙሉ በሙሉ ተስማምቻለሁ።

የጥናቱ ተሳታፊ---------- ፊርማ ---------- ቀን ----------

ከላይ በተዘረዘሩት ጉዳዮች ሙሉ በሙሉ ተስማምቻለሁ።

የጥናቱ አድራጊ---------- ፊርማ ----------ቀን ----------

Appendix -1

Afaan- oromo version

Consent from Research Particinpants

Maqaa mana barumsaa----------

Maqaa nama qo'aannoo gaggeessu ----------

Mata duree qo'annooo:- Godiinaa Iluabba boraatti barsiisonni mana barumsaa Dambii S/ 1ffaa (1-8) jiraan barumsaa dandeettiwwaan barattotaa giddugaleessa godhatee keennu irraatti hubanno fi ilaalchi isanii qo'aachuu ta'aa

Hirmaattotaa :-Barattotaa ,Barsiisootaa fi Oggaanaa mana /B/ Dambii S/ 1ffaa Hundaa duraa galmaa ga'iinsaa qo'aannoo kana hirmaannaa kessanif isin gadlateeffachaa unkii kun kaayyo qo'annichaa, ga'ee keessaanifi wantootaa guttaamuu qabaan kan qabatee dhaa

Qo'aanno fedhiin irratti hirmaattan kanaaf ga'ee isin irraa eggaamu:

1. Daawwaannaa dareefi
2. Maree gaaffifi deebii irraatti godhamuuf yoo xiqqaatee yeroo tokkoof eyyaamuu .

Kaayyooo qo'anniichaa

1. Barsiisonni Dambii S/1ffaa barbaachissummaa barnootaa danddeettiwwaan barattotaa giddugaleessa godhatee beekuudhaa fi galmaa ga'iinsa isaatifis hubanno fi ilaalchaa isaan qabana addaf baasee ibsuu .
2. Barsiisonni Dambii S/1ffaa haalaa baruuf barsiisuu kan barattotaa giddugaleessa godhatee taasiisuuf mala maalii akkka fayyaadaman ibsuu

Yeroo qo'aanno gaggeessutti kanneen armaan gadii hundaa gutuuf qophii kootin mirkaneessaa

1. Odeeffanno isin naaf kennitaanif shakkin tokko iyyuu akka isin kessaatti hin umaamneef maqaa biraa moggaassun fayyadamaa.
2. Yeroo mare gaaffi fi deebii waraabbi sagalee yoo eyyaamtaan odeffannoo kessaan icciitin eegaammaa

3. Qo'aannoo kanaaf akkumaa eyyaama kessanin hirmaattaan yeroo barbaaddanitti sabaaba kaminiyyuu hirmaachuu dhisuu akka dandeessaan nan mirkaneessaa .

Kannen armaan olii irraatti wali galeeraa

Hirmaataa----------mallatto ---------- guyyaa.----------

Qo'ataa ----------mallatto----------guyyaa----------