TEACHING AND LEARNING STYLES AT THE GRADUATE PROGRAMS OF ADDIS ABABA UNIVERSITY

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A Thesis submitted to

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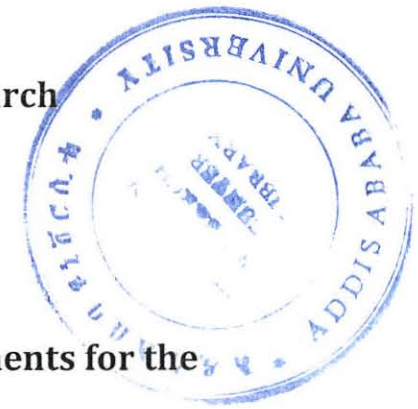

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This is to certify that the thesis prepared by Meskerem Berhanu, entitled:

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is submitted in Partial fulfillment of the Requirements for the Degree of Master of Arts in Educational Research and Development complies with the regulations of the university and meets the accepted standards with respects to originality and quality.

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LIST OF ACRONYMS

AAU	Addis Ababa University
DF	Degree Of Freedom
GI	Graduate Instructor
GS	Graduate Students
LS	Learning Style
M.A	Masters of Arts
TS	Teaching Style

ABSTRACT

The present study was conducted to find out the teaching and learning styles at the Graduate programs of AAU. Descriptive survey design was used to assess the teaching and learning styles at the graduate programs of AAU. The subjects in this study were 100 graduate students and 50 instructors teaching in the graduate program. Simple random techniques were used to select the graduate students and instructors. Data were collected through questionnaire, document analysis and structured interview. For better understanding of the situation a mixed method was employed with an emphasis on triangulation design. The mean value, frequency, percentage, independent t-test and multiple regressions were used to analyze data quantitatively and qualitative data were analyzed qualitatively by the interpretation and description of the respondent's ideas. The finding of the study showed that there was learning style difference between male and female graduate students. It was found out that tactile types of learning style was a learning style of the majority of Graduate students and Delegator types of teaching style was a teaching style of the majority of instructors. The study also showed that there was significant mean difference between teaching style due to teaching experience and age in the sampled institutions. The mean difference was found out between types of learning styles and types of teaching style that are adopted in the sampled institutions. Based on the findings of this study, it's recommended that teaching style should be improved in such a way that students are encouraged in questioning, creative thinking and problem solving and also its recommended that salary should be revised and upgrade in order to make teaching an attractive Profession and also make the instructor motivated for the job.

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Throughout the world, people are looking to education to pave the way for a more just social order on the grounds that education instills in the young crucial humanitarian values such as equity, tolerance and peace. Progress in education is taken to be essential for sustainable development, environmental protection, improvement in maternal and child health and participation in democratic social and political processes. Education is also currently becoming the most important contributor to national economic growth. Empirical evidence suggests that educational investment has been one of the most important factors contributing to economic growth in both developed and developing countries. Haddad et al. (1990), for example, suggest that expenditure on education contributes positively to labor productivity and the economic payoff to spending on education- from both the private and public standpoint- is high. They argue that improving access to and the quality of basic education is priority in almost every low-income and middle-income country. Similarly, Raudenbush and Willms (1991) and Lockheed and Verspoor (1991) argue that to increase the pace of economic and social development in developing countries, schools must teach most school age children the essential skills targeted by the primary school curriculum, which include literacy, numeracy, communication skills and problem solving skills. Access to good-quality schooling is thus, of central importance to national development.

Ethiopia is one of the world's oldest civilizations and Africa's oldest independent country and also one of the world's oldest nations, dating back 2,000 years. However, it is now one of the poorest countries in the world and is beset by multifaceted social, economic, and political problems, with poverty the most serious. The future responsibility for alleviating these multidimensional problems and developing this poor country to at least the level of middle developed countries will fall to its youth. This will be possible if its youth are effective and successful in education, particularly in higher education, since it is believed that attainment of the highest standards of education is fundamental to the dynamic development of science and

technology, which, in turn, has significant impact on the cultural, socio-economic, and political development of any nation. The role that higher education plays to this effect is paramount. Recognizing this, in recent years the Ethiopian government has been exerting efforts and working aggressively, through expanding higher education institutions and building their capacities and increasing the rate of enrollment, to produce well trained and qualified citizens who can take part in the development endeavors of the country. Accounting for individual learning styles is not a new idea. As early as 334 BC, Aristotle said that "each child possessed specific talents and skills" and he noticed individual differences in young children. In the early 1900's, several personality theories and classifications for individual differences were advanced; these focused especially on the relationship between memory and visual or oral instructional methods. The research in learning styles then declined due to the emphasis on the student's IQ and academic achievement. In the last half of the 1900's, however, there has been a renewed interest in learning styles research and many educators are attempting to apply the results within the classroom.

Learning is indispensable ingredient of human life. No one can survive in this world without learning. As man is a social being, he has to learn in order to lead his life in a better way. Learning does not mean only the product or outcome for which the whole process of formal and non- formal education is organized. It is the process of reconstructing of experiences and modifying the existing knowledge in light of previous knowledge. Learning is one of the most important criteria in declaring one educational organization as successful or unsuccessful. Learning style is an individual's natural or habitual pattern of acquiring and processing information in learning situations. a core concept is that individuals differ in how they learn. The idea of individualized learning styles originated in the 1970s, and has greatly influenced education. Proponents of the use of learning styles in education recommend that teachers assess the learning styles of their students and adapt their classroom methods to best fit each student's learning style. Although there is ample evidence for differences in individual thinking and ways of processing various types of information, few studies have reliably tested the validity of using learning styles in education. Critics say there is no evidence that identifying an individual student's learning style produces better outcomes. There is evidence of empirical and pedagogical problems related to the use of learning tasks to "correspond to

differences in a one-to-one fashion". Well-designed studies contradict the widespread "meshing hypothesis", that a student will learn best if taught in a method deemed appropriate for the student's learning style.

It is known that learning processes vary from person to person due to the presence of biological and psychological differences. As Pask (1988) points out more than three-fifths of a person's learning style is biologically imposed. Moreover, Reiff (1992) states that all learners have individual attributes relating to their learning processes. Sitt-gohdes (2001) also holds that most teachers teach the way they have already learned. These might have caused the frustration of a good number of learners as they witness that their learning preferences are not accounted for by many teachers. The case is more serious in a context where students come from diverse educational experiences and with different cultural backgrounds.

Humans have adapted to their environments throughout history. These adaptive patterns have allowed us to survive these environments. although we have evolve as part of the adaptation process we, as humans, are different; and the concept of one size fits all is inadequate, especially regarding the way we learn or the learning process. The concept of learning styles is one such example. If instructors recognize students as being different, and if they assume, based on research regarding learning theories and learning styles, that each student has a preferred learning environment, determination of student learning styles could offer insight to instructors to help facilitate a more favorable learning environment for all students and potentially improve academic performance. Graham, Garton, and Gowdy (2001) reported, "[l]earning style has been found to be an important variable in students' academic achievement, how students learn and teachers teach, and student-teacher interaction" (p.31). Rudd, baker, and Hoover (1998) acknowledged that there are "many differences among students which can be easily observed and identified such as race, gender, age and academic ability" (p.18). They (Rudd et al., 1998) also suggested that individual learning styles are not as easily identified as these simple observations, and that instructors tend to teach the way they were taught and typically have a limited understanding of the different learning styles of their students. if instructors recognize students as being different, and if they assume, based on research regarding learning theories and learning styles, that each student has a preferred learning environment, determination of student learning styles could offer insight to

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1.2 STATEMENT OF THE PROBLEM

Students' varieties of learning styles have not been addressed properly. Some learners are visual learners. They learn best by seeing someone else do it. Other learners are auditory. They learn by relying most on their ability to hear. Still there are other groups of learners who learn mainly by self-involvement in an activity. Though there are very few students who are exclusively one kind of learner, the great majority of them ,however,(22 out of 30 students in a research conducted, for example by Silverman (1996) could enjoy a blend of visual, auditory, and kinesthetic activities, which are all the characteristic features of active learning.

According to Keefe and Ferrell (1990), learning problems are frequently not related to the difficulty of the subject matter but rather to the type and level of the cognitive processes required to learn the material. Additionally, Dunn (1983) found that dramatic improvement in students' achievement in cases where learning styles have been taken into account show that the way things are taught had a greater impact than the content covered in a course of study. It is believed that when teachers are able to analyses the differences and needs of their students, the educational process is likely to become optimized for both students and teachers (Fairhurst & Fairhurst 1995). Learning styles are among the concepts that are postulated by researchers

to show learners' differences and varied needs. As a result, this research is aim at finding out the learning and teaching style at the graduate program level in Addis Ababa university.

Higher education in Ethiopia, elsewhere, is expected to seek, explain and disseminate knowledge. The higher education institutions are expected to produce graduates capable of bringing about change and improvement in the society. There has been serious concern about the quality of teaching and learning that takes place in these institutions. The gap between the societal expectations and the actual performance of higher education institutions in Ethiopia has become a serious concern among many people. (Daniel, 2004)

According to Daniel higher education teachers identified several problems that affect quality of teaching and learning in higher education institution, dominance of lecture method, poor guidance and counseling services, lack of pedagogical training ,lack of experience and qualification of teachers, attitude towards education course and teaching, introducing active (task-based) learning: evaluation mechanisms and limitations in the area of research as well as shortage of facilities were identified as problems across higher education institutions. Ayalew, et al (2009) found out that the teaching-learning processes in the Ethiopian universities were highly teacher centered .They further contended that little is attempted to employ active learning strategies. Hence, researching the match between learning and teaching styles could help to improve quality of education at large in higher education institutions.

1.3 RESEARCH QUESTIONS

The study attempts to give solutions to the following research questions:

1) What are the dominant types of learning styles and teaching styles adopted by students and instructors respectively of AAU at the graduate program level in the college of education and behavioral studies and institute of educational research and development?
2) Is there a relation between teaching and learning styles in Addis Ababa University at the graduate program level in the college of education and behavioral studies and institute of educational research and development?

3) What are the benefits of determining students learning styles and teaching styles in AAU at the graduate program level in the college of education and behavioral studies and institute of educational research and development?
4) Is age and teaching experience related to teaching style
5) Does family background affect the learning style of the graduate student?

1.4. HYPOTHESIS OF THE STUDY

There were two hypotheses are drawn to be tested .The hypotheses are null hypotheses, in other words, rejecting the hypotheses implies accepting the alternative research hypotheses.
Research hypotheses:

1) Ho: there is no significant difference between learning styles of male vs. female students

   In college of education and behavioral studies and institute of educational research and

   Development.

2) Ho: there is no significant difference between teaching styles due to teaching experience and age in college of education and behavioral studies and institute of educational Research and development.

   $Y=a+b_1x_1+b_2x_2+e$ i.e. Y=teaching style, x_1=teaching experience, x_2=age

1.5. SIGNIFICANCES OF THE STUDY

The study may be beneficial for our educational system generally and in higher education specifically. The students and the teachers studying or teaching at university level, the educational managers, curriculum designers, researchers and scholars might get some benefit from this study. For students it can be helpful as they may have better understanding of their preferred way of learning. The learners can know which type of learners excel in examination, and perform well in terms of grade achievement.

This study can be helpful in the way that the teachers of different disciplines understand their students learning styles, and learn how different demographic variables affect the

learning styles of students. They can know of which learning style students perform well in examination, and they could devise different strategies to ensure the excellence of other learners having different learning styles. They could plan their instructions according to the varied needs of different learners. They may try to plan to engage in other teaching methods except lecture method. The teachers will know how important it is to get the knowledge of learning styles to make teaching successful. In other words teachers and students both can get maximum benefit out of these learning styles. The teacher can modify his/ her teaching or instructions in order to facilitate the learners' demands and requirements and the learner can know about his/ her own learning style preferences and can plan to get his/ her targets achieved by having the knowledge about his learning style. The study will also be a step for the future researchers to explore the relationship of learning styles with the dimensions of teaching-learning process, and system of education.

1.6. DELIMITATION OF THE STUDY

The study was delimited to college of educational and behavioral studies and institute of educational research and development. The researcher found this delimitation to be important so as to make the study manageable in terms of time, resource and manpower.

1.7. LIMITATIONS OF THE STUDY

There is a dearth of empirical studies carried out on teaching and learning styles in Addis Ababa University .Hence, it was not possible to corroborate the findings of this study with previous studies conducted in Ethiopia.

1.8. DEFINITIONS OF KEY TERM

Auditory Learning Style: learning style involves the transfer of information through listening: to the spoken word, of self or others, of sounds and noises. Learning by listening and speaking.

Delegator Types Of Teaching Style: teaching style place much control and responsibility for learning on individuals or group of students.

Demonstrator Types of Teaching Style: teaching style act as role model by demonstrating skills and process.

Facilitator Types of Teaching Style: teaching style is used to learn how to use the content in problem solving way and design learning situations and activities.

Formal Authority Types of Teaching Style: teaching style feel responsible for providing and controlling the flow of content and also not concerned with building relationship with the students.

Kinesthetic Learning Style: learning involves physical experience-touching, feeling, and holding practical hands –on experiences. Learning by feeling and touching

Learning Style: are the characteristics and specialized way of grasping and processing information .it is the way in which we see, conceptualize, organize and recall information: it's the way we learn.

Teaching Style: is the set of teaching tactics and strategies.

Tactile Learning Style: Learning By Doing

Visual Learning Style: leaning style involves the use of seen or observed things, including pictures, diagrams, and demonstrations, displays, handouts, films, fillip-chart, etc. Learning by seeing and reading

1.9. ORGANIZATION OF THE STUDY

In this paper, unit one contains an introductory part that gives information on the background, statement of the problem, objectivity, delimitation and limitation of the research conducted. unit two reviews conceptualization of learning and teaching styles ,gender difference in learning style, the types of teaching and learning styles, the relationships between learning and teaching styles and also factors affecting teaching and learning styles. Unit three presents methodology, study population, study design, sample size and tests (independent t-test, correlation and multiple regressions) by using SPSS. Unit four presents data analysis and presentation and unit five presents summary of findings, conclusion and recommendation.

CHAPTER TWO

LITERATURE REVIEW

2.1 CONCEPTUALIZATION OF LEARNING AND TEACHING STYLES

This chapter presents the reviewed literature as classified under two subtitles namely

(1) Conceptualization of learning style ,models, benefits ,determinants and gender difference of learning style
(2) Conceptualization of teaching style, models and benefits of teaching style.

A review of literature on learning and teaching style reveals that studies are hardly available dealing with the specific problem addressed by this research .however, studies, which are related to this research, are quite extensive though most of them were conducted in developed countries.

2.1.1 CONCEPTUALIZATION OF LEARNING STYLES

The term 'learning style" has been defined in several ways by many authors, yet the most representative definitions refer to two essential aspects:
a) the learning style represents an individual's preferred ways of responding (cognitively or behaviorally) to learning tasks which change depending on the environment or context (Peterson, et al., 2009), and

b) The learning style refers to the idea that individuals differ in regard to what type of instruction is most effective for them (Pashler, et al., 2008).starting from these two perspectives, we have noticed that the learning style represent a complex issue, both for students and teachers. From the students' perspective, the learning style indicates a general preference for learning and encompasses cognitive, affective, psychomotor, and physiological dimensions (Knowles, et al., 2005). On the other hand, taking into account the teachers' perspective, the fact that students have different leaning styles represents a constant challenge, because the optimal instruction presupposes diagnosing individuals'

learning styles and tailoring instruction accordingly (Pashler et al., 2008). Facing the various challenges of the effective learning issue, many researchers attempted to conceptually systematize the learning preferences by constructing explanatory models of learning styles. The term *learning style* only began to appear in the learning literature in the 1970s. One of the reasons put forward for the emergence of the term is that learning style has a practical application, particularly in education and training. Riding & Cheema (1991) suggest that it appeared as a replacement term for cognitive style and cognitive style is only part of an individual's learning style. The term learning style indicates an interest in the totality of the processes undertaken during learning. Learning style therefore relates to the general tendency towards A Particular Learning Approach Displayed by an Individual.

Learning styles refer to the variations in your ability to accumulate as well as assimilate information. Basically, you are learning style is the method that best allows you to gather and use knowledge in a specific manner. Most experts agree that there are three basic learning styles. Each individual may possess a single style or could possess a combination of different learning styles. In most cases, the characteristics of a learning style can even be observed at a relatively young age. Once you have identified your particular learning style you will be able to identify ways in which you can adapt the learning process and your studies to maximize your education.

2.2 CONCEPTUALIZATION OF TEACHING STYLES

According to Schneider teaching style refers to the teaching strategies and methods employed plus use of certain kinds of rhetoric's. But often, the literature only focuses on one of these dimensions. "The term itself has no agreed definition but the more widely accepted definitions refer to it as "a set of teaching tactics" (Galton et al, 1980) "instructional format" (Siedentop, 1991). In [physical education] circles the definition of it as "the general pattern created by using a particular set of strategies"" [teaching styles in physical education and Mosston's spectrum], retrieved 15:43, 11 august 2007 (Mest).

Teaching styles pupils styles and the effects of the interaction of these on achievement. in recent years, the study of 'styles' has become cautious and has waned. Style is a vaguer concept than personality. Consequently, the correlations with achievement are harder to

track down. In considering teacher styles we would be interested in the contribution of cognitive and affective characteristics of the teacher in classroom tactics and their relationship to the achievement of the pupils. The interaction of cognitive styles of students and teachers has been looked at by in research using medical student. From the results, they felt there were some indications 'that teachers and students having similar styles formed the most successful combination' in terms of examination results. It would not be surprising if the style adopted by teachers did not have some effect on the learning of individuals with compatible styles. But the evidence from a large volume of American literature is not wholeheartedly supportive (Child, 2004).

Perhaps naturally it follows that you might also want to address how you conceptualize teaching – what do you think it means "to teach," and how you believe you facilitate the learning process as a "teacher." to help you determine your view on teaching, you might finish the statement, "*I believe the role of the teacher is...*" again, this could be metaphorical, or you might reflect on what you believe an instructor's responsibility is towards his or her students in terms of motivation, content, support, etc. Style differs from aptitude in the sense that overall there is no right or wrong way; although in a specific context one mode of thinking might be more appropriate. Aptitudes can be seen as being one-way starting from a zero position of having no competence and moving upwards with increasing ability. There is no benefit from not possessing ability. Styles are usually postulated in bi-polar terms with each alternative conferring some advantages and some disadvantages. Bernard (1972) has confirmed in his experiments that the personality of teacher is a powerful factor in the learning habits and personality development of pupils. The oxford dictionary tells us that style is the manner of doing something as opposed to the water with which a person is working. Therefore style has to do with personality and motivation, as well as the thinking tactics used for tackling problem.

Successful patterns of behavior most suited to our personal make up and external constraints become established as habits of responding. These response sets, as they are called. Become the bricks from which our personal lifestyles are built and it is within this area that we might look for useful generalizations about achievement styles. Two crucial

aspects of style are of particular concern. These are cognitive and affective style. Cognitive style involves those characteristic patterns of perceiving and thinking (Child, 2004).

2.2.1 SEVEN THINGS TO KNOW ABOUT TEACHING YOUR OWN COURSE WHILE IN GRADUATE SCHOOL

There are seven pieces of advice to better prepare the pre doctoral graduate student to assume the role of the professor before he or she assumes the title (or salary!). This article does not cover general topics of importance for the novice teacher such as constructing a syllabus, selecting textbooks, or developing methods of evaluation, as these topics are well-covered by extant literature on teaching (e.g., Mc- Keachie and Kulik 1975; Johnson 1995; Lowman 1995). Instead, these tips are intended to assist graduate students in understanding the challenges of and expectations for teaching in the context of a PhD. Program. Although no advice can change the fact that teaching will seem daunting to the Uninitiated, With the Right Expectations, Independent Teaching Can Be a Rewarding and Valuable Part of Graduate Student Professional Development.

2.2.1.1 ANTICIPATE AND UNDERSTAND STUDENT ATTITUDES

The professor in a college classroom commands a level of respect from undergraduates that the graduate instructor will not enjoy from the outset. This respect must be earned. students may be disappointed or even angry to learn that they have paid tuition to be taught by an experienced professor and instead have been given a mere "trainee." students will see the graduate instructor, an individual who may be only slightly older than they are and similar in appearance, as a peer rather than an authority figure. If they see you as a peer, they will anticipate more lenient treatment. Students may believe that because you have recently been an undergraduate, you will be more empathetic and susceptible to excuses. In one memorable instance, a student expected me to excuse amassed assignment with the entreaty, "come on, bro, you remember how it is when you party too hard, right?" it is inconceivable that students would make such a plea to a tenured professor, but they may feel entirely comfortable doing so to a twenty-something graduate student. Preempt this behavior by taking great care to establish and maintain an image of professionalism and control in the classroom. Appearance counts. If you are only a few years older than your

students, set yourself apart by avoiding the casual style of dress that graduate students notoriously adopt. (Lowman 1995)Look like the students expect a professor to look. Additionally, while the title of "professor" has yet to be earned, ask your students to refer to you with the appropriate title (i.e., Mr., Mrs., or Mrs.) rather than by your first name. This distinction will reinforce the fact that you may be less intimidating than a professor, but you are not a peer. The best defense against student expectations is to be positive and present yourself with supreme confidence, even though your initial teaching experiences will be plagued with nervousness and doubts about your own competence. Instructor self-efficacy— your opinion of your ability to teach effectively—is an important component of how you will be perceived by students. In short, success in the classroom starts with confidence (Eison 1990), and graduate instructors need to work harder than professors to build and maintain it. Nothing builds confidence like diligent preparation. Prepare detailed, well-researched outlines of lectures, classroom activities, and written assignments. Practice your lectures either alone or to an audience of colleagues. Mentally prepare yourself to look and act more professional and confident than you will be during your first teaching experiences.

2.1.1.2 PREPARE IN ADVANCE FOR YOUR MISTAKES

As a graduate student with little or no teaching experience, your students will expect you to make mistakes. They are correct; you will. You will plan lectures that last an hour and find that they last only 40 minutes. You will be asked a question to which you do not readily know the answer while dozens of eyes stare at you expectantly. You may end up deviating from the carefully planned schedule in your syllabus. Some of your attempts to foster discussion in the classroom will be unsuccessful. The key to preventing these errors from affecting your overall performance is to spend time planning and practicing how you will deal with inevitable rookie mistakes. Prepare a backup topic or an in-class activity of 15 to 20 minutes that can quickly be implemented if a lecture runs short. Schedule flexible time in your syllabus to compensate for topics that take more time than expected. Practice delivering a calm response—"i don't know that off the top of my head. Can i find the answer and e-mail you after class?"—to questions that catch you off guard. Most important, in the same way that a comedian cannot linger over a poor joke, a teacher cannot dwell on mistakes. (Lowman 1995) Inform the class of how you

will address the problem and move on rather than drawing attention to something that does not go as planned. Show that you are as calm and collected as a more experienced professor, even if you feel anything but.

2.2.1.3. TAKE ADVANTAGE OF AVAILABLE RESOURCES

It is tempting to see our first teaching opportunity as a chance to create and conduct our dream course. Even if the assignment is to teach an established course such as introductory American government, there is great temptation to disregard the existing curriculum and strike out on one's own. This is a poor strategy. The first teaching experience is inevitably overwhelming, especially for a second- or third-year graduate student who may not feel well prepared to teach. Remember that it is possible to use an existing syllabus that has been successfully used by faculty members in the department while still personalizing the course to make it feel like your own. Colleagues can also provide assignments, in-class activities, and exam questions that can be used directly or modified to meet your specific objectives. Although budding academics may recoil instinctively from this type of "pedagogical plagiarism," creating all aspects of a course from scratch is neither required nor expected. In many cases, it will be actively discouraged. just as reading others' research can help you develop your own; reviewing course materials used by your peers can spark new questions, ideas, and teaching methods. Starting from scratch may seem like a good idea, but it is necessary to master walking on level ground before attempting to climb a mountain. No matter how much time you expect teaching to take, it will take more. Do not increase your burden by attempting to reinvent the wheel or failing to take advantage of the resources available from other instructors.(Lowman 1995)

A great way to put your personal stamp on a course is through the creative use of new tools and technology in the classroom. These resources are one area in which youth and inexperience can be an asset. You can approach your course without years of accumulated habits and with an open mind about ways to enhance the classroom experience. Compared to your senior colleagues, you may be more adept at improving lectures with visual aids through the use of tools such as web-based simulations, podcasting lectures, and online course management programs like blackboard.

You are familiar with these tools, as are your students. Take advantage of that situation. Because you are still a student and have been an undergraduate recently, you have fresh memories of the characteristics of poor teaching: disorganization, a lack of clear objectives, monotonous lecturing, bad power point presentations, and distant or aloof teachers. The qualities that you disliked as a student are likely to be quite similar to what your students will dislike. At the beginning of your career, you are in a great position to avoid making the same mistakes by getting creative and finding effective uses for all of the tools available to the college teacher today. . (Lowman 1995)

2.1.1.4 KNOW WHEN TO SAY WHEN (TO HELPFUL COLLEAGUES)

Aside from providing syllabi, exams, and reading lists, faculty members can be an invaluable source of advice to the new teacher. Do not dismiss their opinions even when your first reaction is to disagree. However, being a first-time teacher is not unlike being a new parent. You will become a recipient—and often an unwilling one—of copious amounts of advice from some of your academic elders and graduate student colleagues. You will be besieged with tips on writing exams, lecturing, choosing textbooks, and every other aspect of teaching a course. Consider the wisdom of experienced teachers with an open mind while remembering that you need not accept all of it. There is a point at which additional advice, however well meant, is unhelpful and can lead you to second-guess decisions you have already made. Politely and tactfully thank your helpful colleagues without reopening discussion of all aspects of the course for revision. Have confidence in the decisions you make and avoid the time trap of repeatedly revising them. Even colleagues with good intentions can undermine your confidence by offering additional advice after you have carefully considered the options and made decisions about the core aspects of your course. . (Lowman 1995)

2.1.1. 5. AVOID ACTING

Lacking confidence in our skills, many of us assume that the best way to be a good teacher is to imitate one. We see good teachers among our colleagues or recall our favorite college professors and set out to teach as they do. In other words, we attempt to play a character in the same way that an actor does. . (Lowman 1995)This approach is a recipe for disaster. What works for your colleagues? Or great professors from your undergraduate years will not

necessarily work for you. Their senses of humor are not the same as yours, nor are their strengths as lecturers or facilitators of discussion. It is important to find your own voice, which is a process that involves trial and error. Furthermore, the teaching styles that appealed to you as a future PhD. Student will not necessarily be effective in reaching a diverse audience of undergraduates. Heppner reminds graduate students that as undergraduates, and enjoyed the challenges of using your brain. that description may not fit all of your [students].what might be a terribly appealing approach to a committed student might well be a turnoff or even a threat to a student who views college . . . as a place to earn [his or her] union card" (Heppner 2007, 12). The student body at your undergraduate institution may be vastly different than the one you will be teaching as a graduate student. Identifying the teaching methods that are appropriate for your audience is preferable to assuming that pedagogical strategies are universally applicable. A thorough review of over 80 years of quantitative research on undergraduate perceptions of instructor quality reveals that there is no single profile of a "good" teacher (Young and Shaw 1999; Algozzine et al. 2004). As Mckeachie (1997, 1218) notes, "effective teachers come in all shapes and sizes." although certain basic traits such as respect for students and fair grading should obviously be common to all teachers, your teaching style will ultimately be unique to your personality and strengths (Grasha and Yangarber-Hicks 2000). As fondly as we may recall our class with professor wonderful during our college days, it is neither possible nor desirable to replicate that experience for our students by attempting to be someone else in the classroom.

2.2.1. 6. PRIORITIZE AND PROTECTYOUR OTHER RESPONSIBILITIES

Teaching while in graduate school creates significant time management challenges. the average graduate student may have to juggle a nearly overwhelming slate of responsibilities—simultaneously teaching a course, taking three or four graduate seminars, studying for qualifying exams, and making progress on a dissertation or dissertation proposal, all while attempting to lead a normal family and social life. . (Lowman 1995). It is important to devote significant time and energy to teaching, but for new teachers, this focus can often come at the expense of other equally important responsibilities. Counter this imbalance by exercising self discipline and strong organizational skills. Create a schedule with a limited but realistic

amount of time for teaching responsibilities. Several resources provide a useful set of guidelines for budgeting time in teaching a large college class such as a typical introductory

American government course (Heppner 2007; Curzan and Damour 2006). Remember that each hour of class time requires a bare minimum of one or two hours of preparation to create a lecture that meets the basic standards of professionalism. Developing *good* lectures involves a preparation-to-lecture ratio greater than four to one (Heppner 2007, 14–25). Designing a syllabus, writing exams and other assignments, and grading all consume time at a similar rate. While most first-time teachers have experience with grading as teaching assistants, novices should note that a minimum of 10 to 15 minutes is required for reading and providing thoughtful written commentary on each essay exam or research paper. Resources are available to help graduate students develop more efficient grading skills without sacrificing accuracy (Walvoord and Johnson Anderson 1998). Remember that the process of teaching resembles matter in a gaseous state; it expands to fill whatever space you provide for it. Confine work on your teaching duties to the designated times and use the remainder of your schedule for your academic work. Do not lose sight of the fact that your primary responsibility as a graduate student is to execute a dissertation. Developing good college teaching skills will accomplish little on the job market, even at teaching-oriented universities, unless they are accompanied by a PhD. And an active research agenda.

2.1.1. 7 MAKE IT FUN

Onwuegbuzie et al. (2007) found that although the subject is addressed by few, if any, teaching evaluation forms, enthusiasm is one of the most important predictors of how students perceive teaching. Baum (2002) notes, "when we think about enthusiasm in education, our concern is usually students' enthusiasm for learning. I think that our own enthusiasm for teaching is even more critical." since a novice graduate student will likely make more teaching mistakes than a tenured professor, Baum's point is particularly relevant. The beginning teacher will need to rely on energy and enthusiasm in lieu of experience and expertise. Students can be harsh, but they can also be very forgiving of mistakes from a teacher whom they perceive to be exerting his or her strongest effort. Projecting a positive attitude and

getting excited about teaching does not just improve the students' experience in your course; learning how to have fun with teaching also makes the job easier on *you*. Evidence suggests that the culture of PhD. programs socializes graduate students to emphasize research and treat teaching as an unwelcome burden on their time (Atwell 1996; Nyquist et al. 1999). But political scientists who enter academia already prioritizing research can hardly expect to avoid teaching duties throughout their careers. even the most teaching-averse members of the profession must recognize the problems that phrases like "indifferent" or "terrible" on teaching evaluations will create during tenure and promotion reviews. Spending time early in your career to discover how you can make teaching enjoyable is a good investment. You will develop lasting habits during your initial teaching experiences (Boice 1992), so it makes sense to ensure that these habits are constructive. If you struggle to get excited about teaching, move away from the traditional lecture format. There are comprehensive resources available in print (e.g., Johnson, Johnson, and smith 1998; Meyers and Jones 1993) and online1 that describe dozens of active learning exercises for the college classroom. Although the literature on pedagogy lacks consensus on the greater efficacy of active learning versus lecturing (Omelicheva and Avdeyeva 2008), using the former can do wonders to perk up a class that is becoming dull. The archives of *ps* also provide numerous examples of active learning exercises for specific courses and topics in political science (e.g.,Kelle 2008; Raymond and Sorensen 2008;wallin 2005; Occhipinti 2003; Ciliotta-Rubery and levy 2000; Alex-Assensoh 2000).

2.3 RELATIONSHIPS BETWEEN TEACHING AND LEARNING STYLES

Teaching and learning are the two sides of a coin. The most accepted criterion for measuring good teaching is the amount of student learning that occurs. There are consistently high correlations between students' ratings of the "amount learned" in the course and their overall ratings of the teacher and the course. Those who learned more gave their teachers higher ratings (Cohen, 1981; the ball and Franklin, 2001). This same criterion was also put forth by Thomas Angelo, when he said; "teaching in the absence of learning is just talking." Doyle.t. (n.d.). a teacher's effectiveness is again about student learning.Styles influence how students learn, how teachers teach, and how the two interact. Each person is born with certain

tendencies toward particular styles, but these biological or inherited characteristics are influenced by culture, personal experiences, maturity level, and development. Style can be considered a "contextual" variable or construct because what the learner brings to the learning experience is as much a part of the context as are the important features of the experience itself.

The students have different learning styles. Hence, more students are reached through a diversified approach to delivering course content. Familiarity with learning style differences will help you understand implications of your chosen teaching style. Students preferentially take in and process information in different ways: by seeing and hearing, reflecting and acting, reasoning logically and intuitively, analyzing and visualizing. When mismatches exist between learning styles of most students in a class and the teaching style of the professor, the students may become bored and inattentive in class, do poorly on tests, and get discouraged about the courses, the curriculum, and themselves. To overcome these problems, teachers should strive for a balance of instructional methods through a diversified approach. Tailor your approach to meet student learning needs. You can combine teaching styles for different types of content and diversity of student needs. Some class sessions may rely on lecture while others may employ more interactive models. Your subject-area may determine to what extent you are able to use varied approaches and to what extent you can individualize your instruction. In considering improving teaching and student learning, one needs to understand the way(s) in which an individual learns. it is widely accepted that while it is possible to identify common constituent elements, the learning process varies at an individual level. Students develop a way or *style* of learning, and refine that style in response to three groups of factors: *unconscious personal interventions by the individual*, *conscious interventions by the learners themselves*, and *interventions by some other external agent*. Students would be more attracted to teaching styles that complement their learning and personality needs (Zhang, 2007).

We think that this approach brings up a new perspective upon the differentiation of the instructional activity. thus, in our opinion, an efficient differentiation does not make reference only to a single criterion (e.g. the students' learning style), but in order to meet the learning needs of each student, differentiation may be nuanced by simultaneous reference to more

criteria which have in view more of the students' characteristics (e.g. the profile of the attended faculty, the students' interests, the learning rhythm, etc.). Leaving from this approach, we will try, in our study, to identify the most adequate teaching strategies corresponding to every learning style, by taking into account another important difference between the students, namely the profile of their faculty. to accomplish that, we'll make reference to the studies in the literature that offer suggestions concerning the most appropriate instructional strategies according to the learners' preferences (Anderson, 2007; Arthurs, 2007; Knowles et al., 2005; Tomlinson, 2000; Nilson, 2010). Following this research line, our intention within this study is to move things forward by making a comparison between pre-service teachers studying educational sciences, economic sciences, and foreign languages, in order to find out the most appropriate teaching strategies for students with the same learning styles who attend different faculty.

2.4 WHY INCOPORATE LEARNING STYLES IN TEACHING

we believe there are many reasons to incorporate an understanding of learning styles in our teaching .here are some starting points for concederation.

2.4.1 MAKING TEACHING AND LEARNING A DIALOUGE .

Whether we are aware of it or not, an asssumption underlyning many of our teaching practices is that students are "empty vessels ," and our role is to fill them with knowledge .but increasinglly ,research on student learning suggests that the metaphor of "dialoge " is more approprate in that is emphasized. " the interactive, cooperative,relation aspects of teaching learning "(Tibetius,1986, 148). Once faculity shift from the "empty vessels" model to a dialogic and communal one,old habit in teaching begin to shift . All lecture class no longer entails simply a scripted delivery of information (no matter how well done), but it may also include a varity of "active learning" techniques that truly engage students in the collective dialoges.

2.4.2 RESPONDING TO A MORE DIVERSE STUDENT BODY

By now it is axiomatic to point out that student bodies are increasingly diverse ,not only in terms of ethnicity and gender ,but also interms of age ,nationality , cultural background, etc.

This divercity can affect classroom settings in many ways , including the divercity of learning styles.for example ,older students who can draw from their life expreance are more likely to be independent ,'self –directed'learners(Knowles,1980). And thanks to the work by belenky et al (1986) there is conciderable evidence to suggest that many women tend to approach learning in more " connected"ways, meaning by style that emphasized empatthy, collaburation , and carefull listening .meanwhile other research suggests that African American and mexican – american students are more likely ton prefer working with others to achieve common goals (Banks,1988) despite these apparent tendencies , it is equally important not to pige on hole students on the basis of expected learning styles since a vast range of individunal differences is evident within any demographic group.

2.4.3 COMMUNICATING OUR MESSAGE.

As faculty, we tend to be passionately committed to our discipline profession and are anxious to convey its significance and knowledgeable to our students. Despite our good intentions, we may be concerned covering the subject matter that we lose track of how much of that material really get conveyed through our taken for granted teaching modes .for example, in typical 50- minute teaching class student retain 70% what is conveyed in the first 10 minute but only 20% from the last 10 minute (Mc Keachie ,1994, p.56). If we really want to get our message across, we need to orchestrate "the material" in a multi – faceted ways across the range of student learning styles.

2.4.4 MAKING TEACHING MORE REWARDING

If we are not inclined to much self refelation about our teaching practice ,we are likely to continue to teach others then way we learn best , assuming this way work for all students . but given the increasing diveristy of student body, as well as to the higher expectations for teachinfg performance among univeristy adminstrators, it's likely that many of us are feeling a bit uneasy about teaching the way we always have ; it may simply feel a bit less' right ',a little less rewarding. In the area of research , faculity take a great pride for lounching subsistantive innovation in their fields.it's our contention that by making an effort to consider student learning styles we may be able to reap equal satisfaction from rienvigorating our teaching practices.(Kolb,1981)

2.4.5 INSURING THE FUTURE OF OUR DISCIPLINES

An undisputed assumption in career counseling is that any individual will be better suited to some tasks, subject areas, and careers than others, as a function of personality, talents cognitive styles, and so on. on the other hand , not all the habits and conversations of a given discipline /profession are inherent in even the most essential aspects of a given field ,some of the established tradition of teaching and learning a given field may be counter – productive . Over 15 years ago, educational theories David Kolb observed, "Over time … selection and socialization pressures combine to produce an increasingly impermeable and homogeneous disciplinary culture and correspondingly specialized students orientation to learning" (Kolb, 1981,234)

2.5 LEARNING STYLE MODELS

In this section, following learning style models will discusses in detail.

2.5.1 KOLB'S LEARNING STYLES INVENTORY (LSI)

This inventory is developed by David, a .Kolb as a self-assessment exercise and a means for construct validation of experiential learning theory (elt). Experiential learning theory has proved to be helpful in providing a mechanism for learning based innovations. It assists in improving instructional designs, curriculum development and life-long learning. The educators are now focusing on experiential model learning rather than the old behaviorist models of learning.

2.5.1.1 ADAPTIVE MODES

Kolb believed that the learning that is based on experience is the true learning. these are four primary adaptive modes. Concrete experience, reflective observation, abstract conceptualization, and active experimentation. Kolb (1981) says that with each of these four modes, a major dimension of personal growth is associated. Development in the concrete experience adaptive mode is characterized by increase in affective complexity. Development in the reflective observation mode is characterized by increase in perceptual complexity. Development in the abstract conceptualization and active experimentation

mode is characterized, respectively, by increase in symbolic complexity and behavioral complexity.

The asserts that first of all we experience the things from our senses, then this concrete experience helps us to reflect on it by using listening and sight ability, then what ever we built through reflective observation, goes under the process of abstract conceptualization where different ideas are formed, and on the basis of these theories, we actively perform something, or act on those theories. He also says that these abilities can be found in some person at different age level, as well as we use these abilities in different type of skills. There are some professions that demand the particular learning abilities that exist in experiential learning cycle. The persons who are having concrete experience (ce) ability emphasize the ability to employ feeling. This ability demands the sensitivity towards the people's emotions and values. They perform well in social professions, like education, social work etc. The persons who are having command on reflective observation (ro) rely on watching and listening. They try to use their reflective observation in order to find out the solutions to the problems. The people having ability in abstract conceptualization (ac) use logic, ideas and concepts. They give preference to models. In the last those persons who are social and want to work on key positions in organizations, have the ability of active experimentation (ae). They trust more on the people rather than the concepts or ideas. For these people only those things matter which have work for them and are practical. In other words they are pragmatists. They can easily take different actions. Kolb (1981)

2.5.1.2 KOLB'S LEARNING STYLES

Kolb has identified four types of learning styles. He believes that every individual chooses a different phase of learning cycle because of difference in their hereditary equipment, their particular life experiences, and the demands of present environment. Kolb 1984 cited in Yamazaki 2002, 2003 believes that learning style is influenced by personality type, educational majors, or the subject choices, career choices, nature of job, roles and duties one has to perform in the profession. It means that people learn differently as they are different in terms of the above mentioned variables. There are four primary modes of

grasping and processing information the combination of any two creates a new style of learning that different in terms of relating to the environment. Each learning style results from using two types of abilities in order to learn. These four learning styles are diverging, assimilating, converging, and accommodating. Diverging learning style is the combination of concrete experience (ce), and reflective observation (ro); assimilating style is based on reflective observation (ro) and abstract conceptualization (ac). While the combination of abstract conceptualization (ac) and active experimentation (ae) gives birth to converging learning style. The most comprehensive or the highest order learning style i.e accommodating learning style is resulted from the interaction of active experimentation (ae) and concrete experience (ce). The accommodating style comes in the last because it has the ability to have all the qualities of the previous learning styles. Some detail of these learning styles is given below.

2.5.1.2.1 DIVERGENT STYLE

The concrete experience and reflective observation are dominant learning abilities of divergers. A characteristic question of this type is ***"why".*** divergers view concrete situations from many different points of view. They can generate many ideas and have broad cultural interests. They like to gather information and they are interested in people. divergers are considered to be imaginative and emotional. They specialize in people. The divergers in formal learning situations prefer to work with in groups. They listen with an open mind. They like to receive personalized feedback. Their imagination and power of observation help them to consider events, issues or problems from a variety of angles. The persons with diverging learning style respond well if they know that the learning material relates to their experience. They like their instructors to work as motivators.

The divergent learners prefer to receive information by using concrete experiencing and then processing by reflective observation. Such learners view different situation according to their own point of view. But they prefer to see its different aspects carefully. They try to think that why this particular incident has happened and then reflect on it. Their focus is on various aspects of a single issue or problem. They demand such type of educational opportunities which are practical as well providing the chance for reflection. They find

relationships in different things. They employ their imaginative ability and use multi-perspective approach. (Holley & Jenkins, 1993).

2.5.1.2.2 ASSIMILATIVE STYLE

Reflective observation and abstract conceptualization are the dominant abilities of assimilators. A characteristic question of this type is "***what***". Assimilators accommodate diverse observation and reflection in an integrated explanation or in theoretical models. They use practice and sharp logic to judge information and models on their merits. They assimilate diverse ideas and information or adapt them to an encompassing theoretical framework. The assimilators make model and then judge them. Their interest is mainly in the beauty and completeness of the models themselves. These people try to fit the summarized information in model that they already know.

The assimilators are good in understanding a large amount of data as well as variety of data. They focus more on ideas and less on people. They are good in putting a large amount of data into concise and logical order. They prefer theory's logical soundness than practical value. Such people are effective in information and science careers. In formal learning situations assimilators prefer reading, lectures, exploring analytical models, and having time to think things through. This type of learners prefers to have information in an organized and logical fashion. Such type of learners likes to have opportunities for reflection. They like such type of instructors, which are expert in their field. These learners reflect on abstract concepts and convert the information into logical form, using inductive reasoning to achieve theory building (Holley & Jenkins, 1993). These learners are more concise and logical than divergent learners. There strength is reflection. They are good to think that why a particular thing has happened and what can be its further implication. They are inductive in terms of moving from specific to general in a well manner. They can reflect very well on abstract concepts and transform the information into logical form. They build their own theories while using their power of inductive reasoning. Their emphasis is not on the practical value of the theories but logical soundness and logical beauty. (Felder, 1996).

2.5.1.2.3 CONVERGENT STYLE

Abstract conceptualization and active experimentation are the dominant abilities of convergers. A characteristic question of this type of learning type is ***"how"***. Convergers combine theory and practice for achieving practical and achievable solutions. They use selective attention, problem-solving capabilities and progress- oriented decision-making. They adapt and apply models in order to provide new answers and solutions to practical questions. Convergers transform ambiguous tries into a single, defensible approach. This style is suitable where a single correct answer or solution is necessary and possible. These people have concentrated attention. They prefer technical tasks and problems rather than with social issues and interpersonal issues. They are considered to be effective in specialist and technology careers. In formal learning situations they prefer to experiment with ideas, simulations, and laboratory assignments and practical applications. Convergers work well when they have the opportunities to deal with well-defined tasks. This type of learners demand coaching, guided practice and feedback. The person with convergent learning style focus on theories just to find their practical use, and to solve the problems in light of the sound theories. These learners work well with well defined, well structured tasks. Their learning is through trial and error. They like to work in such environment that is safe and sound (Felder, 1996). Converges use theory to solve the problems. For convergers any situation that demands the free use of theories is more appreciated than the situations where they have to use the already decided solutions. Convergers excel in finding practical uses for theories (Kolb, 1985). They favor problem-based learning, wherein the instructor assigns open-ended questions and allows the students to discover things on their own (Felder & Brent, 2005).

2.5.1.2.4 ACCOMMODATIVE STYLE

The accommodators want to know what will happen if they do this (Felder, 1996). Concrete experience and active experimentation are dominant abilities of accommodators. A characteristic question of this type is ***"what if"***. They try things out and seeking out new experiences. They use adaptability, commitments, and entrepreneurships. These people adapt and react to changing circumstances. Such types of people are suited for situations

where immediate progress is required. They believe on trial-and- error approach. Their interest is directed towards action and new experiences. They prefer "gut" feelings rather than logical analysis. They primarily learn from "hands- on experiences. They rely on people in order to get information rather than on technical analysis for solving the problems. They like applying course material in new situations to solve those problems that are real. For such type of learners it is better that the instructor provides maximum opportunities to the learners that they discover things for themselves. The teacher should provide them the chances that they utilize whatever they have learnt. These types of learners like the situations where they are having the maximum freedom to apply the knowledge.

2.5.2 FELDER-SILVERMAN LEARNING STYLE MODEL

This Model Is Presented By Richard M. Felder And Linda K. Silverman. The Instrument Is Called Index of Learning Style (ILS). It Is Developed By Felder And Solo Man. This Instrument Assesses Preferences on Four Dimensions.

2.5.2.1 SENSING/ INTUITIVE

Sensing learners are those learners who prefer to learn the factual knowledge. They do not in favor of complexities and ambiguities as they are concrete learners. They approach well defined and well tested methods for solving a particular problem. They are against of those assessments which are not covered properly and explicitly in the classroom. These learners are good in routine tasks and assignments.. They are good in memorizing the facts, and dislike those projects which are not very familiar. They are totally against of surprises and innovations. They always demand connectivity between the courses and real world. They will focus and will be curious to know the practical value of the learning experiences and activities. In contrast to the sensing learners the intuitive learners go for finding out the possibilities and trying them out. Felder, and Solo man, 1993). .They are innovative and against of routine assignments and home works. They are in favor of challenging jobs. They always seek for those educational opportunities where they could use their insight for solving the problems they curricula and activities rather they feel happy with surprises. They love to have those opportunities where they can work at their own.

2.5.2.2 VISUAL/ VERBAL

Visual learners go well with pictures, maps, charts, visual description, diagrams, and flow charts. These learners require the visual explanation for the complex phenomena. They are good observers. They are against of verbal instructions and lectures. They do not learn well in those conditions and situations where they are not having the visual description and they have to rely on other senses in order to receive information. In contrast to the visual learners the verbal learners are called the auditory learners as well. They understand better the oral instructions and verbal explanations of different information. They are quite comfortable with lengthy lectures. And their sense of hearing gives them more fruitful results in examination, as our examination system favors the auditory learners. They like to listen to the lengthy speeches and debates and discussions without feeling monotony. Felder, and Solo man, 1993).

2.5.2.3 SEQUENTIAL/ GLOBAL

Sequential learners tend to learn in step by step manner. Their understanding of different issues is in linear fashion. They demand for logical association between different parts as one is connected on the basis of some reason with the previous one. In contrast to the sequential learners, the global learners learn randomly. They seek for the completeness of the things. For them the whole is much greater than its constituent parts. These learners solve complex problems very quickly, as they rush to the conclusion without going through in too many details. (Felder, and Solo man, 1993).

2.5.2.4 ACTIVE / REFLECTIVE

Active learners learn well while trying out the things at their own. They are in favor of practical activities. They retain information by relating it with practical. Rather than spending time on thinking they just go ahead and do the things. They believe in movement and like group activities. The reflective learners on the other hand are thinking learners. They cannot do anything unless they spend reasonable amount of time on thinking. Such people like individual assignments. They can attend lectures but do not like to take notes.

(Felder, and Solo man, 1993). This domain is related to Kolb's active/reflective continuums.

Index of learning style (ils) provides an indication of learning style profile of a student and especially of a group. The results of the ils should not be either used to place the students in particular discipline or subject, or labeling the student. It should be only used in order to find out that in which subjects or with which teaching method the student may feel difficulty. This instrument is used mostly by the researchers in order to find out the learning styles of engineering students and teachers. (Felder, and Solo man, 1993). This index of learning styles measures four aspects whether one person is going to prefer sensing over intuition or vice versa, whether one is visual learner or verbal learner, what will be the preference of individual while learning something, will his preference be the step by step manner or random, and lastly whether one wants to be active while learning or he prefers to be reflective.

2.5.3 PERCEPTUAL MODALITY

Perceptual modality refers to the primary way our bodies take in information. Normally there are four types of perceptual modalities:

2.5.3.1 VISUAL LEARNERS

They prefer to see the things in order to learn. They like to learn through pictures, images. They can understand different ideas while watching or seeing. These learners create mental pictures in their mind about those things or concepts, which they have to learn. They are interested more in pictures, and photographs than the discussions. The visual learner feels comfortable when they can see the person who is speaking. Visual learners are shape and form reinters. Print oriented people rely more on words or numbers in their images. (kolb,1985)

2.5.3.2 AUDITORY LEARNERS

Auditory learners are those learners, who want to listen, whatever they have to learn. They like to listen to voices, sounds, debates, and speeches. They like lectures, and discussions,

and these auditory learners make mental dialogues in order to learn the things. They speak loudly whatever they have to learn. These learners are more successful in schools and colleges, because most of the teaching learning process depends on listening and speaking. These auditory –verbal processors (talkers) are often called interactive. (kolb,1985)

2.5.3.3 KINESTHETIC LEARNERS

Kinesthetic learners are those learners who focus on movements and positions. They want to be involved in the learning process by sensing. Tactile learners learn better by touching rather than seeing or listening. (kolb,1985)

2.5.3.4 TACTILE LEARNERS

The students who are tactile learners like to have notes during the lectures as well as when studying something difficult or new. They often like to draw or doodle to remember. They do well with hands-on such as projects, demonstrations, or labs. These four modalities are very simple in understanding, as every person can understand this learning style model due to its clear concept. (kolb,1985)

2.5.4 THE GRASHA- RIECHMANN STUDENT LEARNING STYLE SCALES (GRSLSS)

The Grasha- Riechmann student learning style scales was developed in the early 1970s. This instrument has been used to find out the preferences of the learners to interact with teachers, peers in classroom sitting. This instrument has described following learning styles.

2.5.4.1 INDEPENDENT LEARNER

These learners prefer to learn at their own. They like self-paced learning and feel comfortable with individual projects and assignments. This dimension is also discussed in canfields learning style inventory.

2.5. 4.2 DEPENDENT LEARNERS

These learners look at their teachers and classmates in order to learn. They depend on others for their own learning. They like that someone in authority position give them instructions about what to do, and what to learn.

2.5.4.3 COMPETITIVE LEARNERS

These learners learn in order to get better grades than their peers. They learn to get recognition and appreciation.

2.5.4.4 COLLABORATIVE LEARNERS

The collaborative learners like to learn with the other students .they are good in group projects. They like discussions with teachers and peers.

2.5.4.5 AVOIDANT LEARNERS

These learners are not interested at all in the classroom activities. They are least concerned about the content and material that is being delivered in the class.

2.5.4.6 PARTICIPANT LEARNERS

The participant learners are involved in classroom activities. They like the classroom discussions, lectures. And feel good to be the part of all the things happening in the class. These are all the learning styles that are present in every learner, but their ratio can be changed. There can be some persons who have two or three dominant styles in them. An ideal student would be that who has a balance of all the learning styles in him or her. Grasha believes that learning styles can be changed when a student encounters new life experiences or new educational experiences. He also believes that students' learning styles may be changed with a particular teaching style. Grasha- Riechmann student learning style scales (Grslss) can be used in order to measure the learning styles of college students as well as of the distance learners. Huska- Riechmann & Grasha say that it is ideal instrument to be used with senior high school students, college/ university students. These scales focus on how students have interaction with teachers and peers. These scales also identify how

the students learn in general. These scales also help teachers to plan their instructions in order to cater the needs of all the learners. Grslss also help the students to learn and grow with those styles that are underused.

4 .5 EXPERIENTIAL LEARNING THEORY

Experiential learning is commonly used in two different senses. Firstly, it is used to describe the prior learning that is brought to a new situation arising from the life experience of the learner. This prior learning that provides the base for any learning that follows. Secondly, to refer to learning processes in which the experience of the learner is used as the prime source and stimulus for learning. (English, 2005, and Brookfield, 1983)

Experiential learning may also be defined as :"The process of creating and transforming experience into knowledge, skills, attitudes, values, emotions, beliefs and senses. It is the process through which individuals become themselves". (Jarvis et al, 1998). Experiential learning is not just the creation or transformation. It is the combination of both processes.

Experiential learning involves one individual fully as a whole person. It demands the full engagement of a person in the learning experience physically, emotionally and intellectually. It is the matter of insight that is gained through the internal processing of observed instructions, that is based on our past and present experiences. One has to involve in learning internally as well as externally. Experiential learning can also be defined as "the insight gained through the conscious or unconscious internalization of our own or observed instructions, which is build upon our past experiences and knowledge (Beard, 2002).

Experiential learning theory defines learning as "The process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience" (Kolb, 1984:41).

2.5.5.1 TYPES OF EXPERIENCE

Jarvis and His Colleagues (1998) have differentiated six types of experience in relation to experiential learning theory namely.

2.5.1.1 Primary Experience

Is an experience by any or all, of the senses in aspect of social context within which the experience occurs? This is directly experienced by the person. It has no other references in it. Jarvis and His Colleagues (1998)

2.5.5.1.2 Secondary Experience

IS a mediated experience having little or nothing to do with the social context within which the experience occurs, such as a video presentation, or even a theoretical discussion? This experience is actually by other person and it reaches to us by other persons verbally, or whether by recording or video tapes. Jarvis and His Colleagues (1998)

2.5.5.1.3 Actual Experience

Is an experience that occurs at the present time. This experience is taken place at reality and there is no imagination involved. Jarvis and His Colleagues (1998)

2.5.5.1.4 Recalled Experience

Is the process of recalling memories of previous actual experience. It is to remember or recall that experience that had taken place earlier or previously. Jarvis and His Colleagues (1998)

2.5.5.1.5. Real Experience

Is an experience of the actual context? It is real in the sense that it has its real context Jarvis and His Colleagues (1998)

2.5.5.1.6 Artificial Experience

Is a created form of experience, highlighting some aspects of other real or actual experiences. This is a manipulated experience in order to fulfill some specific needs. These six types are given by Jarvis and his colleagues. Jarvis and His Colleagues (1998)

2.5.5.2 NATURE OF EXPERIENTIAL LEARNING

Different people view experiential learning in a different manner. Some people take it in the form of process. Some focus on its importance and need in education, whereas some people relate it to growth and development of individual. Some theorists believe that experiential learning is somehow that learning that is the result of experience. Other theorists believe experiential learning is active form of learning where individual is actively involved, mentally and physically. Some believe that it is learning that has its roots in past experiences. For finding out different points of view of different people, practitioners, and theorists the first international conference was on experiential learning was held in 1987. Different people had different perspectives on experiential learning. When the book was produced after this conference it was considered the most suitable to divide the diverse perspectives in four "tribes" of experiential learning. These tribes as located in different "villages" had different cultures and points of reference.

2.6 TYPES OF TEACHING STYLE

Teaching style refers to the manner in which a teacher manages instruction and the classroom environment. There are three major teaching styles (permissive, authoritarian and democratic) that are prevalent in classrooms. Most of us have a teaching style that is dominant but display characteristics that include some aspects of each of the other styles. The teaching style that identifies your personality in the classroom controls most aspects of your instruction, classroom management strategies and techniques. Your teaching style determines how you implement classroom management tasks.

Permissive teachers establish few rules and tend to be inconsistent in enforcing rules or applying consequences for misbehavior. **Authoritarian** teachers establish the classroom rules, learning is teacher centered, the student's role is to comply with the rules and complete all work satisfactorily. **Democratic** teachers establish a classroom environment that includes input on nearly all issues of management, voting privileges for students, and generally positive reactions to student desires and needs. Authoritarian and democratic teaching styles tend to be most effective because disruptions in the classroom are kept to a minimum. Teachers who exhibit a permissive teaching style sacrifice an orderly classroom by trying to allow the

students to police themselves. Permissive teachers are generally hands-off, encouraging their students to develop independence and individual responsibility. Many new teachers enter the teaching profession because they like children and teens and enjoy being around them. Beginning teachers tend to be permissive in their dealings with students. Students quickly pick up on these tendencies to overlook minor infractions. Classroom control typically suffers as a result. It is recommended that new teachers develop a teaching style that leans toward authoritarian or democratic style personality types.

Teaching styles do not develop naturally and without practice or experimentation. It takes time before a teacher establishes a style that accommodates particular teaching methods and families. Permissive teachers tend toward the personal and social families of instruction and emphasize discussion and Socratic methods. Authoritarian teachers prefer direct instruction and information processing and behavioral modification families. Democratic teachers typically adopt managerial methods and find the social interaction family of methods to be most conducive to their style. It is extremely important that teachers clearly understand their style and consistently use one or two styles. Each teaching style and the degree to which the teachers express it have implications for the styles that the students bring to the classroom.

1) **Lecture Method:** a lecture is a talk or verbal presentation given by a lecturer, trainer or speaker to an audience. With all the advancement of training systems and computer technology, lecture method is still a backbone widely used in teaching and training at higher level of education. This method is economical, can be used for a large number of students, material can be covered in a structured manner and the teacher has a great control of time and material .

2) Discussion: it is a free verbal exchange of ideas between group members or teacher and students. For effective discussion the students should have prior knowledge and information about the topic to be discussed. Mccarthy, p. (1992) stated strengths of class discussion as; pools ideas and experiences from group, and allows everyone to participate in an active process. Kochhar (2000, p.347) stated that; a problem, an issue, a situation in which there is a difference of opinion, is suitable for discussion method of teaching. our study also revealed that the students rated group discussion (class discussion) as the second best method by giving

reasons that; it has more participation of students, the learning is more effective, the students don't have to rely on rote learning, every student give his/ her opinion, and this method develops creativity among students. A teacher-centered approach is the note-taking/lecture model. Teachers may attempt to maximize their delivery of information and control of the class while minimizing their time and effort.

3) Role Play: role play occurs when participants take on differentiated roles in a simulation. These may be highly prescribed, including biographical details, and even personality, attitudes and beliefs; or loosely indicated by an outline of the function or task. These techniques have already demonstrated their applicability to a wide range of learners, subjects and levels. (Singh, and Sudarshan, 2005, p 238, 239). It is a memorable and enjoyable learning method. To gain maximum benefits from this method, the incidents selected for enactment should be as realistic as the situation allows.

4) Case Study: primarily developed in business and law contexts, case method teaching can be productively used in liberal arts, engineering, and education. This method is basically used to develop critical thinking and problem-solving skills, as well as to present students with real-life situations. The students are presented with a record set of circumstances based on actual event or an imaginary situation and they are asked:

5) Assignment Method: written assignments help in organization of knowledge, assimilation of facts and better preparation of examinations. It emphasizes on individual pupil work and the method that helps both teaching and learning processes (Kochhar, 2000, P.358).

Pros of Teacher-Centered Approaches Is:

- A Large Amount Of Information Can Be Shared In A Short Amount Of Time
- The Teacher Has Control Of Organization
- The Teacher Has Control Of Pacing And Content
- Accommodates Large Numbers Of Students
- Allows For Quick And Easy Assessment Methods Kochhar, 2000, P.358).

Cons of Teacher-Centered Approaches Are:

- Knowledge Controlled By The Instructor
- One-Way Communication
- Not Necessarily Conducive To Critical Thinking
- Promotes Passive Learning
- Not an Optimal Way Of Learning For Many Students Kochhar, 2000, P.358).

Two Teacher-Centered Approaches are defined as:

A) Formal Authority: the teacher feels responsible for providing and controlling the flow of the content and the student is expected to receive the content. One type of statement made by an instructor with this teaching style is "I am the flashlight for my students; I illuminate the content and materials so that my students can see the importance of the material." teachers with this teaching style are not as concerned with building relationships with their students nor is it as important that their students form relationships with other students. This type of teacher doesn't usually require much student participation in class. Kochhar, 2000, P.358).

B) Demonstrator Model: this type of teacher acts as a role model by demonstrating skills and processes and then as a coach/guide in helping students to develop and apply these skills and knowledge. A teacher with this type of teaching style might comment: "I show my students how to properly do a task or work through a problem and then I'll help them master the task or problem solution. It's important that my students can independently solve similar problems by using and adapting demonstrated methods." instructors with this teaching style are interested in encouraging student participation and adapting their presentation to include various learning styles. Students are expected to take some responsibility for learning what they need to know and for asking for help when they don't understand something. Kochhar, 2000, P.358).

Student-Centered Approaches Have Pros and Cons

Many teachers use more interactive approaches in an effort to be responsive to a variety of learning styles. Student-centered approaches require active participation from teachers and students, putting much of the responsibility for leaning

Pros Of A Student-Centered Approach Include:

- Engages Students In The Learning Process
- Encourages Student Ownership Of Knowledge
- Provides Real Life Connections
- Promotes Active Learning
- Fosters Critical Thinking
- Addresses Multiple Learning Styles
- Allows For Varied Assessment Strategies Kochhar, 2000, P.358).

Cons Of A Student-Centered Approach Include:

- More Difficult To Implement With Large Numbers Of Students
- Can Be More Time Consuming Than Lecturing
- Not Effective In All Subject Areas
- Students May Resist New Approaches Kochhar, 2000, P.358).

Regardless of the cons, the results of educational research studies as well as anecdotal evidence generally show that interactive, student-driven teaching results in successful learning for a broader range of learning styles.

Two Student-Centered Models are defined as:

A) **FACILITATOR**: these teachers tend to focus on activities. There is much more responsibility placed on the students to take the initiative for meeting the demands of various learning tasks. Teachers typically design group activities which necessitate active learning, student-to-student collaboration and problem solving. This type of teacher will often try to

design learning situations and activities that require student processing and application of course content in creative and original ways. While course content is obviously essential, the facilitator does not make them the principal focus of the course goals. Rather, the goal is to learn how to use the content in a problem-solving way. Kochhar, 2000, P.358).

B) DELEGATOR: places much control and responsibility for learning on individuals or groups of students. This type of teacher will often give students a choice designing and implementing their own complex learning projects and will act in a consultative role. Students are often asked to work independently or in groups and must be able to maintain motivation and focus for complex projects. Kochhar, 2000, P.358).

2.7 THE INFLUENCE OF THE GENDER FACTOR ON A STUDENT'S LEARNING STYLE

Males and females learn differently from each other (Grebb, 1999; Ebel, 1999; Cavanaugh, 2002). Males tend to be more kinesthetic, tactual, and visual, and they need more mobility in a more informal environment than females. Males are more nonconforming and peer motivated than female. Males tend to learn less by listening. Females, more than males, tend to be auditory, authority-oriented, need significantly more quiet while learning, they are more self- and authorities – motivated, and are more conforming than males (Marcus, 1999; Pizzo, 2000).

There are fundamental differences among males' and females' ways of communicating, the so-called, *and genderless*, as a takeoff on language dialects (Thomson, 1995). She believes that a male's learning focuses on competition, status and independence. On the contrary, a female's world focuses on intimacy, consensus, sometimes and independence as well. Social preferences of males and females are also different during the process of learning. Male students prefer learning tasks connected with competitions in hierarchical groups, while female students learn by collaboration in small groups in which mutual liking is important (Dorval, 2000). Studies conducted by Aries (1996), Leet-pellegrini (2000) and fox (1999) suggest that males feel more comfortable in a lecturing role, which is a demonstration of expertise and status, but females feel more comfortable in a listening role, which show a

desire to collaborate, bond and to be liked by products of a world of connections, not status. Females prefer to share their expertise with others, rather than rivaling with them.At least three-fifths of learning style is genetically stable, the processes of information processing and perception are biologically predetermined. However, there is really no evidence to suggest that gender differences in cognitive abilities are inherited. Human behavior is most influenced by hormones which are related with gender activities. And the hormone that seems to have the greatest impact is testosterone. Prenatal hormones contribute much to the development of human brain and sensitized certain parts of brain, namely, the hypothalamus, which helps to regulate the activity level. Male and female get different amounts of prenatal hormones, which may lead to differences in males' and females' brains. Prenatal hormones significantly shape cognitive abilities (Luria, 1975; Sperry, 1989).

Some researchers have looked for gender differences in overall size of the brain (Springer & Deutsch, 1997; Rogers, 2000; Fausto-Sterling, 2000), others have concentrated on the specific parts of the brain. One area that has been the focus of much study is the area of the brain, called the corpus Callosum. Some research shows that a portion of this bundle of nerve fibers towards the back of the brain (the Splenium) is larger and more rounded in females than males. The function of this part of the corpus Callosum links together parts of the left and right hemispheres that control speech and spatial perception. The larger Splenium may account for females' advantage on some measures of speech production and comprehension. The organization of males' brains may give the advantages on visual-spatial tasks (Allen & Gorski, 1990; Halpern, 1992; wood, 2003).

Some investigations suggest that both hemispheres of a female's brain may be active during certain tasks, while only one hemisphere of a male's brain is active during the same tasks (Rogers, 2001; rider, 2005). Part of the band of fibers connecting the two hemispheres is thicker in a female's brain that allows the greater interaction of the hemispheres. It could explain why males excel on visual-spatial tasks and females on verbal tasks (rider, 2005; Fausto-sterling, 2000). According to Halpern (2000), Geschwind &Galaburda (1999) the right hemisphere of the brain normally is developed faster than the left hemisphere, that is why the left hemisphere is more vulnerable to the relatively high level of prenatal testosterone that male fetuses are exposed to. As a result, the right hemisphere of a male's brain is thought to be

stronger; i.e., it assumes more control than the left hemisphere. Females, on the other hand, have more balanced left and right hemispheres in terms of control. That is why males do worse than females on tasks associated with more left hemisphere activities and better on tasks associated with more right hemisphere activities. Many verbal tasks are associated with greater left hemisphere activities, whereas solving spatial tasks and some logical tasks are associated with greater right hemisphere activities, as a result, males do perform better on spatial and logical tasks, but females with tasks that are mostly connected with the humanities and music. Summing up, the research suggests that hormones, especially, testosterones have impact on cognitive abilities, but much more research needs to be done before we can make any clear conclusions about hormones, gender differences in performance and cognitive abilities in general.

Using the Myers-Briggs type indicator, Nuby and oxford (1996) found a significant difference in learning style preferences of secondary school students from the African American and Native American cultures. African American male and female students indicated a strong preference for the sensing and judging dimensions. On the other hand, Native American male and female students indicated a preference for the intuition and perception dimensions. Regardless of the populations concerned, female students indicated a much stronger preference for the feeling dimension. In a study conducted by Honigsfeld and Kochhar, 2000, P.358).to explore the gender differences in learning styles of adolescents among five nations, it was found that girls showed higher levels of self motivation, persistence, responsibility, need for warmer temperatures, sociological variety, parent motivation, and teacher motivation than boys, using the Dunn and Dunn's learning style inventory. Wehrwein, Lujan and Dicarlo (2007) investigated gender differences in learning style preferences in a group of undergraduate physiology students using the vark questionnaire. The questionnaire consists of items related to learning style preferences in visual (v: learning from graphs, charts, and flow diagrams), auditory (a: learning from speech), read-write (r: learning from reading and writing), and kinesthetic (k: learning from touch, hearing, smell, taste, and sight). Results indicated that most male students preferred multimodal instruction, specifically, four modes (vark), whereas most female students preferred single mode instruction, in particular, the k mode. Severing and ten dam (1994) performed a meta-analysis of the gender effect on two

learning style instruments, namely Kolb's *learning style inventory* and Entwistle's *approaches to studying inventory*, and found a significant gender preference on subscales of these instruments. Men tended to prefer the abstract conceptualization mode of learning more than women, according to Kolb's instrument. Men were likely to adopt a deep approach, be extrinsically motivated and achievement oriented, compared with women, according to Entwistle's instrument. Using canfield's learning 1094 Australasian journal of educational technology, 2010, 26(7) style inventory, Keri (2002) found that more males showed a preference for applied learning styles in which they preferred using everyday life experience as a basis for learning, whereas females tended to be more abstract in that they opted for copious reading assignments, organized learning materials and instructors' knowledge, for learning. These results indicate that there is clear gender differences in learning styles regardless of the instruments used.

2.8 DETERMINATION OF LEARNING STYLES

You can determine the learning style through observation of your skills that are used while learning. You can determine the learning style through observing which way that you learn best and which method are used to ensure that you are absorbing the highest amount of information .guidance counselors and many other services within the school environment are often available to help students to determine which type of learning style that works best for their particular needs, as this can help the student to excel.Alternatively, there are many tests that will you determine your learning style. After answering a series of questions based on situations that occur in learning, as well as asking basic personality questions throughout the test, you are able to determine which learning category that you fall under. There are three main determinants of learning styles. The domination of each makes a style distinctive. (Luria, 1975; Sperry, 1989).

A) PERCEPTUAL MODALITIES

Perceptual modalities are concerned with the biological based responses to our environment. They are those manners or the ways we acquire knowledge in the most suitable way. It is the matter of receiving knowledge or information in the way that is most closely match with our

processing method. Normally there are four perceptual modalities which are visual, auditory, tactile, and kinesthetic. Kochhar, 2000, P.358).

B) INFORMATION PROCESSING

Information processing is the characteristic habit of perceiving, organizing, and remembering information. Everyone is individual and unique in terms of sensing, thinking, retaining information, and the way to go for the solution of the problems. Information processing relies heavily on sensation, as these are the sources to receive the information, the way and quality of sensing leads one individual to perceive it. Perception is incomplete without the organization of the information received by senses. Every individual organizes the information in the mind according to different set principles and then retaining that information and recalling when it is needed .such functions are relatively consistent and unique. Each of us has perceives in a different manner, because it is the matter of relating some meaning to received information. The meaning that one attached with a particular thing, event or situation is based on the personal life experiences of the individual. Kochhar, 2000, P.358).

C) PERSONALITY FACTORS

There are found differences in values, emotions, attentions and other aspects of one self. These aspects constitute personality patterns. These differences are very much important as they help to estimate that how the person will react to different situations and their feelings about different circumstances.

2.9 BENEFITS OF UNDERSTANDING YOUR LEARNING STYLE

It is important to keep in mind that you as an individual are a unique learner. No two people are exactly the same and no two people learn in exactly the same manner. (Luria, 1975; Sperry, 1989).Some of these benefits of learning which category that you fall under when it comes to learning type include:

Being able to learn and absorb information the first time that you hear it and reducing the amount of time and repetition that is required when learning.

- Reducing the amount of reviewing and study time using methods of learning that are not compatible with your learning ability.

Defining your learning type can help you to choose the best study method for you .the majority of people are unsure about which methods that they should use to study and therefore learning which method enable you to learn best can enable you to learn effectively with the least amount of knowledge. (Luria, 1975; Sperry, 1989).

There are many advantages to understanding the way in which you are able to process information most efficiently. Some of these benefits include:

Academic Advantages

- Maximizing Your Learning Potential
- Succeed On All Educational Levels
- Understand How to Best Study and Score Better On Exams and Tests
- Overcome Limitations in the Classroom
- Reduces Frustration and Stress Levels
- Expand Your Existing Learning Strategies

Personal Advantages

- Improve Your Self-Confidence and Self-Esteem
- Learn How to Best Use Your Brain
- Gain Insight into Your Own Strengths As Well As Weaknesses
- Learn How to Enjoy Learning More
- Develop a Motivation for Learning
- How to Maximize Your Natural Abilities and Skills

Professional Advantages

- Stay Up To Date on Professional Topics
- Gain an Edge over the Competition
- Manage Teams in a More Effective Manner

- Learn How to Deliver More Effective Presentations
- Improve Your Sales Skills
- Increasing you're Earning Power

Keep in mind that there is really no right or even no wrong way to learn. Everyone is unique and each learning style offers advantages as well as Disadvantages. Understanding your own learning style can help you to learn as well as work in a more efficient manner. (Luria, 1975; Sperry, 1989).

2.10 BENEFITS OF DETERMINING TEACHING STYLES OF THE INSTRUCTORS

While many people have argued that style is important in teaching, identifying the elements of our styles as teachers has proved to be difficult on reason is that traditionally the concept of style has been viewed in a pejoratives manner. it has been confused with affection ,denigrated as a kind of posturing to mask a lack of substances ,or tolerated as a natural manifestation of personal eccentricities"(Eble,1980,p.1).thus to define style , to understand it ,to develop it ,and to use it effectively entails moving beyond the negative senses in which it's sometimes perceived. style in teaching as in art, music, athletics, managing people, and other areas of endeavor is not something that is put on for the occasion .otherwise it becomes a superficial covering, mask, or a collection of interesting mannerisms that are used to create an impression. Style, able argued, was "what one is (p 95). Our teaching style represents those enduring personal qualities and behaviors that appears in how we conduct our classed .thus, it's both something that defines us, that guides and directs our instructional processes, and that has effects on students and their ability to learn.

While the latter observations may help to illuminate the general nature of our style as teachers, it is deficient .if style is what a teacher is, then there are potentially as many different styles as there are teachers. Style then becomes everything a person does and at the same times nothing that can be studied in a systematic manner. to resolve this dilemma, it would be useful to know just what personal qualities and behaviors are shared by all faculty members .this would allow us to categorize specific types of teaching styles and also would allow us to categorize specific types of teaching styles and to show how people vary on these common

qualities .such information also would allow us to examine how particular characteristics affect students and their subsequent ability to learn.

Understanding our teaching style would be enhanced if we had a list of the elements of style that we use as a basis for examining ourselves .there is, however no clear consensus about the common components of style .it largely depends up on whom you ask ....or at least whom you read .several approaches to understanding our styles as teacher appear in the literature. Various authors emphasized different aspects of how people teach and thus there is little agreement about the Elements of style. Instead, various aspects of our thought and behaviors are highlighted by those attempting to describe teaching style. (Luria, 1975; Sperry, 1989).

Approaches to identifying the elements of styles

1) General Modes of Classroom Behavior the idea that style represents those personal dispositions people publicity display is evident in the education literature.

2) Characteristics associated with Popular Instructors typically such individuals have characteristics that colleagues and students judge to be unique and interesting.

3) The Teaching Method Employed the preferred instructional practices of teacher described their style .thus; a person might be labeled a "lecture", "discussion" leader, or perhaps a "Socratic teacher. "here, style becomes synonymous with the methods employed in the classroom.

4) Behaviors Common to All College Faculty these are identified largely through research on the characteristics associated with "effective teaching."Included here are such things as how teachers organize information, the clarity of presentation, enthusiasms, and their ability to develop rapport with student's .variations among faculty in such behaviors become makers for identifying different in teaching style.

5) The roles teacher play roles are consistent patterns of behaviors that guide and direct our thoughts and behaviors in specific situation. The processes associated with teaching demand that faculty play a number of roles.

6) Personality Traits Characteristics Found in a formal theory of Personality are used To Describe the Style of College Teachers.

7) Archetypal Forms Basic yet Pervasive Forms or Models of Teaching Are Identifying. To Varying Degrees, All Teachers are assumed representations Or Copies of These Basic Forms.
8) Metaphors for Teaching Analogies, similes, allegories and other forms of figurative language are employed to describe the behavior of teacher.

2.11 FACTORS AFFECTING TEACHING AND LEARNING PROCESS

The higher education teachers were identified the following as issue of concern:

A) Lecture method dominates the teaching and learning process

The higher education teacher's sited methods of teaching and learning as one of the serious flows in the teaching learning process .the lecture method persist as a common mode of instruction in colleges of further education and elsewhere. (Daniel,2004)

B) Poor guidance and counseling services

Quite many higher education students need guidance and counseling services for successes in their education. For instance, student's background (family's educational background, culture and environment) affects the teaching and learning process. . (Daniel,2004)

C) Lack of pedagogical training

Most instructors in higher education institutions in the country have no training on teaching. Those who have undergone pedagogical training are limited to few colleges and faculties. . (Daniel,2004)

D) Issues related to evaluation

Measurement and evaluation is one of the crucial elements in the entire teaching and learning process .teaching and testing are inseparable .they are so closely linked that it is virtually impossible to work in either without being constantly concerned with the other (Heaton in Girma, 2001)

2.12 EMPIRICAL VIEW

A review of research in psychology indicates that people exhibit significant individual differences in the cognitive processing styles that they adopt during learning activities, including problem solving and decision-making (Robertson, 1985). With regard to these individual differences, researchers have different definitions and conduct research from different perspectives accordingly. However, findings from both qualitative and quantitative research have indicated several consistent major dimensions of individual differences (Dunn, Debello, Brennan, Krimsky, & Murrain, 1981; riding & Cheema, 1991). Of these dimensions, cognitive style is a major one. The construct of cognitive styles was originally proposed by Allport (1937), referring to an individual's habitual or typical way of perceiving, remembering, thinking, and problem solving. Since then, especially in the last few decades, there has been additional considerable research in this area. In this article, a learning style is viewed as: *"a complexes of related characteristics in which the whole is greater than its parts. Learning style is a gestalt combining internal and external operations derived from the individual's neurobiology, personality and development, and reflected in learner behavior" (Keefe & Ferrell 1990, p. 16).* In other words, learning styles are the information processing habits of an individual. Unlike individual differences in abilities, cognition describes a person's typical mode of thinking, perceiving, remembering, or problem solving. Learning style is usually described as a personality dimension which influences attitudes, values, and social interaction.

A fundamental change in thinking about the nature of instruction and learning was initiated in 1963 when john b. Carroll argued for the idea of mastery learning. Mastery learning suggests that the focus of instruction should be the time required for different students to learn the same material. This contrasts with the classic model in which all students are given the same amount of time to learn and the focus is on differences in ability. The idea of mastery learning amounts to a radical shift in responsibility for teachers; the blame for a student's failure rests with the instruction, not a lack of ability on the part of the student. In a mastery learning environment, the challenge becomes providing enough time and employing instructional strategies so that all students can achieve the same level of teach (Levine, 1985).

Numerous studies related to learning styles and academic performances have been documented over the past twenty-five years. Orr, park, Thompson, d. & Thompson, c., (1999) studied the predominant learning style of 322 (228 female; 94 male) students enrolled in postsecondary technical education institutes in Arkansas. They also studied if there were differences related to learning styles among the students based on gender; program area (business education; health occupations: and trade and industrial); and work experience. As a result of their study, it was determined the dominant learning style of the students, based on the Gregorc style delineator, was concrete sequential (cs), however, most of the students were considered bimodal (dominant in two learning styles). There was no significant difference among learning styles noted based on program area. Participants with more work experience tended to be concrete sequential learners. Regarding the distribution of the participants based on gender; concrete sequential learners were similar between the males and females; more males were abstract sequential and abstract random learners; and more females were considered to be concrete random learners.

Lehman (2011) studied the relationships of learning styles, course grades, and instructional preferences, as well as gender differences related to learning styles in an introductory biology course taught at Longwood University. Her research indicated that of the 173 students (47 male; 126 female) the dominant learning style was concrete sequential (39%). Twelve percent of the students were abstract sequential learners with 21% having abstract random and 28% having concrete random learning styles. No significant differences were noted between gender; grades; or instructional preferences based on learning style. The most popular instructional preferences regardless of learning style were "hands on" activities; field trips; clearly organized and structured lectures; lectures with pictures and diagrams; and educational games or simulations. In an earlier study using the same biology course, Lehman (2007) reported distributions of 43% cs; 14% as; 23% ar; and 20% cr as a result of combined data from multiple studies. Although distributions varied over the six year period, cs was the dominant learning style observed consistently (in both males and females), and as was the learning style least common. The final grade received in the course was not significantly different for either of the learning styles or for gender. When students were assigned to group projects based on like learning styles (homogeneity) or different learning styles

(heterogeneity), project grades were not significantly different. Student satisfaction based on a survey indicated there were significant correlations observed between grades, satisfaction, and perceived learning. Students with the highest course grade were more satisfied with their contribution to the project or their own work and less satisfied with the benefits of cooperative group work.

Anbessa Bekele Nora (January, 2012) studied methods of teaching and their implications for quality of student learning at samara university .his major finding with regard to the teaching methods employed, lecture method was found to be the most commonly employed method as reported by both groups of the respondents. Discussion method was the second most commonly employed method of teaching as to the respondents. In addition, individualized and demonstration methods were employed as the third and fourth by the student respondents and vice versa by the teacher respondents. Inquiry, discovery and laboratory methods were also employed by teachers sometimes. Therefore, in order to see the congruence and consistency of the two groups of respondents' ranking, the rank correlation was computed and tested for its significance. The resulting rank correlation, $r = 0.821$, was a significant correlation with corresponding p-value of $0.023 < 0.05$. Similarly, the data obtained from the interview revealed that lecture method was the most commonly employed method of teaching. Discussion, individualized, and demonstration methods were also employed most commonly next to the lecture method.

Furthermore, 69.1% of the teacher respondents replied that teachers were using the aforementioned methods of teaching to address the different needs of their students depending on the availability of teaching materials/resources, the nature of the course/ subject matter, the topic to be delivered, objectives of the lesson, and the number of students within a class. Regarding this, 80% of the student respondents replied that teachers were using those methods of teaching. To address the different needs of their students depending on the content of the subject matter and the resources available for teaching.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This chapter presents the description of the study design; population of the study; sampling technique, the procedure of selecting sample and sample size of the study; the data collection instrument and procedure; and data analysis techniques of the study.

3.1. DESIGN OF THE STUDY

A descriptive survey design was used so as to assess the teaching and learning styles of Addis Ababa University at the graduate program level. Koul (1996:405) for example states that descriptive survey design becomes useful particularly where one needs to understand some particular information. Best and khan (1989:18) have noted that a descriptive survey research design involves a clearly defined problem and definite objectives.

A descriptive survey design was used to obtain pertinent and precise information concerning the topic of the study. This is because, Best (2005:114) described descriptive research as a scientific investigation that tries to give pictorial account of an event, behavior or situation According to him descriptive research attempts to present the state of educational issues as they exist at the present. The approach of the research in terms of design were both quantitative and qualitative descriptive method .Quantitative method was used to apply frequency and percentage, Independent T-test, mean, and multiple regression of respondents' data collected through questionnaire. Quantitative analysis involves data ranging from simple counts such as frequency of occurrence to more complex data (Saunders, Lewis and Thornhill,1997: 287).

The mixed method was used in which the researcher co nverge qualitative and quantitative data in order to provide a comprehensive analysis of the research problem. The integration of both qualitative and quantitative approach will intend to explicate my investigation with the intention that one does not blemish or lessen the strength of another, but rather complement each other to make stronger interpretation and argument.

A mixed research design was employed for this research work with the intent of addressing the issue in question .This method with the hope that it will help in giving complete set of information on the issue with the two types of data forms (qualitative and quantitative) Creswell and Clark (2007; 9) asserted that mixed method research helps answer questions that can't be answered by qualitative or quantitative approach alone. Therefore this method is employed because it enables the research to grasp the existing learning and teaching style at the graduate program level in Addis Ababa University. In addition, it used for understanding specific and relatively general picture.

Qualitative research approach was used because it has the ability to provide descriptions about teaching and learning styles of AAU by providing information about experiences, beliefs, opinions, emotions, and relationships of AAU teaching and learning styles. With this in mind I attempted to get an in-depth opinion from participants (AAU instructors and students) through depth interviewing and further discussions, systematic observation of selected faculties, and analysis of documentary data. Quantitative research approach was used because it rooted in numbers and statistics with the ability to effectively translate data into easily quantifiable manner.

3.2 DATA SOURCES

In this study, both primary and secondary sources were used to gather adequate information about the teaching and learning styles of Addis Ababa University at the graduate program level. Primary sources was used to get first-hand information concerning the teaching and learning styles at the graduate program level in Addis Ababa university. The primary sources were university students and instructors. The secondary sources were used to strengthen the primary sources. They include books, journals, and articles.

3.3 DELIMITATION OF THE STUDY

The area of the study was purposely selected to college of education and behavioral studies and also department of educational research and development was selected purposively. The reason is that it's accessible and convenient to get responses and also time and financial constrains forced to choose these two programs.

3.4. INSTRUMENTS OF DATA COLLECTION

A questionnaire, interview and document analysis was the main data gathering instruments. This is because of the need to collect adequate data and for triangulation purpose. Therefore, employing multiple data collection instruments helps the researcher to combine, strengthen and amend some of the inadequacies of the data and for triangulating it (Cresswell, 2003:62).

3.5 POPULATION, SAMPLE AND SAMPLING PROCEDURE

The target populations were students and instructors of Addis Ababa University at the graduate program level. According to the data taken from academic and student staff the total population is 1,873 Graduate students and the sample population was 173 instructors .only college of education and behavioral studies and institute of educational research and development and final year regular graduate students were selected for the sample. College of education and behavioral studies and educational research and development were selected purposively among many faculties; the reason is that the researcher believes that as I am an educational researcher I want to see the teaching and learning processes that takes places in educational department and also financial and time constraints forced to choose this program. College of education and behavioral studies encompasses five departments and school of psychology .currently the college runs 16 postgraduate MA programs (Addis Ababa University, Communication Office, 2013) .

Table -1-Faculty of Educational and Behavioral Studies

Department	Academic Program	Graduate Student(Final Year Regular Students)			Total Graduate Students	Academic Staff (Graduate Instructors)		
Curriculum And Teachers Professional Development	Curriculum And Instruction	4	-	4		29	1	30
	Adult And Lifelong Learning	17	3	20				
	Vocational Education	16	4	20				
Educational Planning And Management	Educational Planning And Management	23	6	29	698			26
	Educational Policy And Management	10	-	10				
	Human resources And 0rganizational Development	11	1	12				
Science And Math Education	Mathematics Education	-	-		63			28
	Physics Education							
Social Science and Language Education	Civic And Ethical Education	-	-		203			29
Special Needs Education	Special Need Education	21	20	41	134	8	2	10
School Of Psychology	Clinical Psychology	16	6	22	443			36
	Counseling Psychology	14	3	17				
	Developmental psychology	13	4	17				
	Health Psychology	12	6	18				
	Measurement And Evaluation	-	-	-				
	Social Psychology	11	4	15				
Total Population		164	40	204	1,873			173

Sources: Addis Ababa university communication office Booklet, 2013

The sample must be of an optimum size i.e., it should neither be excessively large nor too small. This is because it should be large enough to be representative of the population and

small enough to be economical in terms of time, money and complexity of analysis (Best and Khan, 1989:16).Simple random techniques were employed to select 4 departments from education and behavioral studies the reason for using simple random sampling (lottery method) is used to give equal chance of being selected.

Table-2 Sampled Department

No	Selected Departments	Final Year Graduate Students			Graduate Instructors		
		M	F	T	M	F	T
1	Curriculum and Teachers Professional Development	37	7	44	29	1	30
2	Educational Planning and Management	44	7	51	-	-	26
3	Special needs Education	21	20	41	8	2	10
4	Educational Research and Development	-	14	14	10	-	10
5	Total Sample Population	100	50	150	47	3	76

The researcher selected probability sampling .Among probability sampling; random sampling was employed for selecting participants on the basis of the researchers' knowledge of the population .Final year graduate students were selected purposively the reason for using simple random sampling was that gives equal chance to choose the population. Sample from final year regular graduate students and graduate instructors were taken based on random sampling. A total sample consists (M=101, F= 50) graduate students and 76 graduate instructor.

Table-3 Sample Population

No	Respondent Category	Number Of Population	Sample Population	Sampling Techniques Used	Data Gathering Instruments Used
1	Graduate Instructors	173	76	Random sampling	Questionnaire And Interview
2	Graduate Students	1,873	150	Random sampling	Questionnaire And Interview

As first step the researcher identified 100 respondents by using random sampling techniques from 150 graduate students from selected departments of college of education and behavioral studies and institute of educational research and development. (i.e. M=50, F=50)

And the next step the researcher was identified 50 respondents by using random sampling techniques from 76 instructors from selected departments of college of educational and behavioral studies and institute of educational research and development. The researcher also identified 6 key informants by using purposive sampling techniques for interview, 3 Graduate regular students and 3 instructors were identified. Questionnaires were distributed to 50 instructors and 100 Graduate students. Interview was conducted on 3 instructors and 3 Graduate students for qualitative analysis.

Table-4 ***Total Sample Size for Graduate Students and Instructors***

No	Respondent Category	Target Population Size			Planned Sample Size			Participated Sample Size		
		M	F	Total	M	F	Total	M	F	Total
1	Graduate students	100	50	150	50	50	100	40	40	80
2	Graduate instructors	-	-	76	-	-	60%(76) =50	-	-	40
3	Total sample size for graduate student	-	-	-	50	50	100			
4	Total sample size of Graduate instructors	-	-	-	-	-	50			
5	Total sample size for Both graduate instructors and students	-	-	-	-	-	150			

3.6 RESEARCH INSTRUMENTS

3.6.1 QUESTIONNAIRES

Questionnaires were used to collect relevant and first-hand information from key informants such as instructors and students. The items of the questionnaires were mainly close-ended questions and accompanied by some open ended ones. The reason why a questionnaire was used is that it is easier to handle and is simpler for the respondents to answer within a short period of time (Koul, 2008:146). It's quite suitable instrument for the collection of standardized and quantifiable information from all members of a sample .It easy to fill out , keep respondents on subjects ,is relatively objective and fairly easy to be tabulated and analyzed (Van Dalen,1973). The questioners for assessing learning style had 26 scaled item and 4 open ended items. The responses sets for the scaled items were strongly agree, agree, disagree, strongly disagree and uncertain. This five scale was selected because it helps in making respondents give a directional response and avoid responses that might be answered with reluctance. Pilot test was conducted to check the validity and reliability of questionnaire prepared for the study. After providing them some information about the objectives of the study and the need of the pilot test, they were informed how to fill and give feedback on the relevance of context, types of questions and lay out of questionnaire. As a result the experts found some vocabularies were vague and needs to be clear for the respondents .Based on the feedback, some questions were modified to improve their clarity and to avoid ambiguity provided with necessary alternatives for they were incomplete.

3.6 .2 IN DEPTH INTERVIEW

Interview is one way to find out what the situation looks like from others point of view. Interview was conducted in order to investigate individual's perspective towards a given phenomenal within its real life context .So that structured interview was employed.3 graduate regular students and 3 instructors were taken from each group in order to get detail information. An interview was being conducted through disclosing the purpose of the study based on the mission and willingness of the participants by the researcher. Both the questioners and interview was conducted in English. The researcher interviewed people to find out from those things we can't directly observe .We can't observe feelings, thought and

intentions. Researchers have to ask people questions about those feelings. The purpose of interviewing starts with the assumption that perspectives of others are , knowledgeable, and able to made explicit (Patton, 2002; Dawson, 2002).

3.7 DOCUMENT ANALYSIS

Document analysis was used to gather necessary information about teaching and learning styles in Addis Ababa University at the graduate program level. This is to strengthen the data obtain through questionnaires and interview. Due to this reason, journals, books, and articles have seen because they are important sources of data to explore educational practices. Supporting this, best and khan (1989:25) have noted that document analyses are important and relevant sources of data, and useful in yielding information and exploring educational practice. Document analysis also were used to enrich the data obtained through questioners and interviews, and to solicit additional information published and unpublished documents. Finally, document analysis was making by the researcher himself.

3.8 PROCEDURES OF DATA COLLECTION

To assess the teaching and learning styles of Addis Ababa University at the graduate program level, first questionnaires were develop. Before starting the actual data collection, it was consider necessary to conduct the pilot testing. Pilot test was conduct this is because how well the particular problem will go, secondly to what extent a particular method of data collection was suitable and how much time it was take to complete the instrument. Accordingly, with some modifications and clarifications, the final instruments was develop and used for the purpose. The questionnaires were design and administer by the researcher to instructors and students.

3.9 MAJOR VARIABLES OF THE STUDY

Major variables of the study are factors that are found at the two other ends.

Table 5 Major variables of the study

No	Independent variables	Dependent variables
1	Sex Family background	Learning style
2	Teaching experience Age	Teaching style

3.10. METHODS OF DATA ANALYSIS

The data analysis procedures were started by tallying and tabulation of the data gathered through questionnaires and transcribing the interview. The data were analyzed on the basis of the research questions. Accordingly frequency counts; percentage, mean, independent t-test, and multiple linear regression were used to analyze the data obtained. The raw data obtained from respondents through questionnaires were organized by computer software called statistical procedure for social science (SPSS) 20 versions. Different statistical techniques were employed on the basis of the nature of the data collected. Consequently, the data collected from the respondents' was analyzed quantitatively and qualitatively. In analyzing the quantitative data, researcher was categorized and frequencies were tally. In qualitative data the data was analyzed by the researcher. Each statement has five responses, strongly agree (SA), Agreed (A), undecided (U), Disagree (D) and Strongly Disagree the different responses. Data that was on the above mentioned five point scale was analyzed. Moreover, mean scores, independent t-test, and multiple regressions were used for analyzing the data. All tests were used to test at the level of significance at 0.05.The researcher used t-test because the data was ordinal and t-test gives fair accurate probabilities even when the populations do not have assumed characteristics.

Independent t-test were used to test the level of significance between learning style of male and female graduate students in the college of education and behavioral studies and institute of educational research and development. The reason for using independent t-test is used to know learning style difference between male and female.

Multiple linear regressions were used to test the level of significance between teaching styles and teaching experience, and age at the graduate program level in college of education and behavioral studies and institute of educational research and development. The reason for using multiple regressions is that used to identify factors affecting teaching style.

On the basis of the analysis and interpretation of data, research findings, and conclusion was drawn and recommendation was made.

3.11 Ethical Consideration

Research ethics help to ensure that as researchers we explicitly consider the needs and concerns of the Addis Ababa university instructors and students, that appropriate oversight for the conduct of research takes place, and that a basis for trust is established between researchers and the Addis Ababa university graduate instructors and students. This means that if a choice must be made between doing harm to a participant and doing harm to the research, it is the research that is sacrificed. The goal of ethics in research is to ensure that is no one is harmed or suffer adverse consequences from the research activities.

The researcher protects the rights of the respondents by: ensuring that none of the respondents would named during the research, respondents were selected to participate without compulsion, respondents were informed the reason and the purpose of the research, there were convincing individual's willing to participate in the study by clarifying about the purpose of the study.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

This chapter deals with the presentation and analyses of the data collected from the two groups- instructors and final year Graduate students through questionnaires. In addition to questionnaire, structured interview was conducted to secure additional qualitative information to find out their perception towards the teaching and learning style at the graduate program level at Addis Ababa University. In this chapter data collected through questionnaire are presented with the help of tables and graphs. An analysis was made for the data obtained from the interview.

All the data gathered from questionnaires were organized in tabular form and interpreted using frequency, percentage ,t-test , and multiple regression .The informative gathered through interview and document analysis were also qualitatively described in words in order to give answer for the basic research questions set in the study. The first part of this study discusses about characteristics of the respondents, while the second part deals with the analysis of the findings of the study corresponding to the basic research questions.

4.1 CHARACTERISTICS OF RESPONDENTS

The characteristics of the participants (instructors and students) were examined in terms of sex, age, academic qualification, workload per hour, year of service based on the responses to the request for personal data in the first section of the questionnaire. Moreover, the analysis and interpretation of the data was also made. Accordingly, the results of the study were presented as follows.

Table .6 Backgrounds of the Graduate students and instructors

Characteristics		Graduate Students		Instructors	
		Freq	%	Freq	%
Sex	Male	40	50%	38	95%
	Female	40	50%	2	5%
Age	20-30	40	50%	-	-
	31-40	31	39%	5	13%
	41-50	9	11%	21	53%
	Above 50	-	-	14	35%
Marital Status	Single	37	46%	-	-
	Married	43	54%	40	100%
Department	Special Needs In education	20	25%	10	25%
	Educational Research and Development	20	25%	10	25%
	Educational Planning And Management	20	25%	10	25%
	Curriculum And Teacher Professional development	20	25%	10	25%
workload per hour	1-6hr	3	4%	3	8%
	7-12hr	57	71%	21	52%
	13-18hr	20	25%	16	40%
Family Educational status for graduate student	Literate	29	36%	-	-
	Illiterate	51	64%	-	-
Educational Level	MA/MSC	80	10%	-	-
	PhD And Above	-	-	40	100%
Teaching experience in years in AAU	1-10yrs	-	-	17	43%
	11-20yrs	-	-	14	35%
	Above 20yrs	-	-	9	22%

4.1.1 NSTRUCTORS DEMOGRAPHIC INFORMATION

Regarding respondent's sex from the above table it is possible to see that 95% of the respondents were male instructors followed by 5% of female instructors. Therefore, there is low participation of female instructors compared to their male counterparts. In relation to age, the majority of the respondents were from 41-50(53%), above 50 (35%) and 31-40 (13%). The majority of the graduate instructors were in the same age group and this may lead to better interaction among them.

As we see from the table equal number of instructors were selected from four departments i.e. special needs in education (25%), educational research and development (25%), educational

leadership and management (25%) and curriculum and teacher professional development (25%). In terms of qualification as the table shows almost all respondents (100%) instructors were PhD holders.

As shown from the table , 52% of the respondents' workload per hour ranges from 7-12hrs, 40% and 8% ranging from 13-18hrs and 1-6hr respectively. With regards to the teaching experience of instructors, 43% ranges from 1-10 yrs and 35% of teaching experience range from 11-20 yrs, 22% above 20 years. In relation to the respondents year of experience it can be seen from the table there were high variation among the respondents teaching experience. In relation to marital status almost all (100%) of the respondents of instructors were married.

4.1.2 GRADUATE STUDENTS DEMOGRAPHIC INFORMATION

Regarding to respondents' sex equal number (50%) of male and 50 (%) female respondents participated in this research. As we see from the table equal number of students were selected from four departments i.e. special needs education (25%), educational research and development (25%), educational leadership and management (25%) and curriculum and teacher professional development (25%).

In relation to the age, almost half of the respondents 50% were ranging from 20-30 yrs, 39% from 31-40 yrs, and 21% from 41-50 yrs and none of the respondents were above 50 yrs. The majority of the graduate students were in the same age group and this may lead to better interaction among them. As shown from the table 71% of Graduate student workload per hour ranges from 7-12 hrs, 25% from 13-18 hrs and 4% 1-6 hrs and. In relation to the marital status 54% of Graduate students were married and 46% were single. With regards to families educational level 64% of Graduate students were illiterate and 36% were literate.

4.2 CONCEPTUALIZATION OF LEARNING STYLE

Graduate students were asked to level of agreement on the concept of learning style and the following results are shown on table -7

Table 7 - Conceptualization of graduate students about Learning Style

No	Item	Response In	SA	A	U	SD	D	Total	Mean
1	Learning style is General reference for learning	Freq	35	43	1	1	-	80	4.40
		%	44	54	1	1	-	100	
2	Student have Different learning Style	Freq	38	37	-	3	2	80	4.33
		%	48	46	-	4	2	100	
3	Each individual may possess single or a combination of different style	Freq	41	30	2	5	2	80	4.29
		%	51	37	3	6	3	100	
	Grand Mean								4.34

5=Strongly Agree (SA), A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree

The above table presents conceptualization of learning style as rated by respondents against the 5 items rating scales. The rating was made on five point scale representing 5= strongly agree (SA), 4=agree (A), 3=undecided (U), 2=Disagree (D) and 1=strongly disagree (SD).

Mean scores are presented in such a way that mean score below 3=indicated misunderstanding of the concept of learning style or the mean score greater than 3 indicated understanding of the concept of learning styles.

As indicated in question 1, the majority 98% (44% plus54%) of the graduate students agreed on item one that states "learning style is a general preference for learning". Since the obtained mean value 4.40 was above the ideal mean i.e. 3.00 .The average responses indicates agreement of respondents to the statement. Hence, according to graduate students learning style is a general preference of learning.

On item 2, the majority 94 %(48% plus46%) of the graduate students agreed on item two that states "student having different types of learning style", 6% disagreed with the idea .Since the obtained mean value 4.33 is above the ideal mean i.e. 3.00. The average response indicates agreement of the respondents to the statement. Thus each student appears having different learning styles.

On item 3, the majority 88% (51plus37) of the graduate student agreed on item that states "each individual may possess a single or a combination of different styles". 6% and 3% disagreed and were not able to decide with the idea respectively. Hence the obtained mean value 4.29 is above the ideal mean i.e.3.00. The average responses indicate agreement of respondents to the statement. Thus, according to graduate students each individual may possess a single or a combination of different style.

4.3 INSTRUCTORS PRACTICE OF TEACHING

Graduate instructors were asked to level agreement on instructor's practice of teaching and the following results are shown on table-8

Table-8- Instructors level of agreement on the practice of teaching

No	Item	Response In	SA	A	U	D	SD	Total	Mean
1	when I teach I take advantage of available resource	Freq	19	21	-	-	-	40	4.47
		%	47	53	-	-	-	100	
2	when I teach I anticipate and understand student attitude	Freq	21	18	1	-	-	40	4.50
		%	52	45	3	-	-	100	
3	My teaching style is best in addressing the needs of the students	Freq	8	24	3	4	1	40	3.85
		%	20	60	7	10	3	100	
4	I use various methods of Teaching to teach student	Freq	17	20	2	-	1	40	4.3
		%	42	50	5	-	3	100	
5	I consider learning objectives or outcome to be achieved	Freq	14	21	5	-	-	40	4.23
		%	35	52	13	-	-	100	
6	My way of teaching creates learner interest, enthusiasm and appreciation	Freq	14	22	4	-	-	40	4.25
		%	35	55	10	-	-	100	
7	when I teach I make it fun	Freq	5	20	11	4	-	40	3.65
		%	12	50	28	10	-	100	
8	when I teach I prepare in advance for mistake	Freq	13	19	8	-	-	40	4.13
		%	33	47	20			100	
	Grand Mean								

5=Strongly Agree (SA), A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree

As we can see from Table 8 Item -1, almost all 100% (47% plus 53%) of the instructors agreed on item that states 'when I teach I take advantage of available resource'. Hence, the obtained mean value 4.47 is above the ideal mean value i.e. 3.00. The average response indicates agreement of respondents to the statement.

Almost 97% (52% plus 54%) of instructors agreed on the item two that states "when I teach I anticipate and understand student's attitude." But only 3% were not able to decide with

the idea. Thus, the obtained mean value 4.50 is above the ideal mean i.e. 3. The average response indicates agreement of respondents to the statement.

80% (60% plus 20%) of instructors agreed on the item three that states "My teaching style is best in addressing the learners need". On contrary 7% and 13% were not able to decide and disagreed with the idea respectively. Since the obtained mean value 3.85 is higher than the ideal mean i.e. 3.00 .The average response indicates agreement of respondents to the statement.

With regards to item -4 92% (42 plus 50) of instructors agreed on ' I use various methods of teaching to teach students'. Only 5% and 3% were not able to decided and disagreed with the idea respectively. Since the obtained mean value 4.30 is above the ideal mean i.e. 3.00. The average response indicates agreement of respondents to the statement.

Item-5 87% (35 plus 52) of instructors agreed on item that states "I consider learning objectives or outcome to be achieved" and 13% were not able to decided with the idea .Thus obtained mean value 4.23 is above the ideal mean i.e. 3.00. The average response indicates agreement of respondents to the statement.

As shown from the above table 90% (35% plus 55%) of Instructors agreed on item that states " My way of teaching creates learner's interest and appreciation" .Only 10% were not able to decide with the idea. Since the obtained mean value 4.25 is above the ideal mean i.e. 3.00. The average response indicates agreement of respondents to the statement.

With regards to item -7 62% (12% plus50) of instructors agreed on item states" when I teach I make it fun" and 28% and 10% were not able to decided and disagree with the idea respectively. Thus, the obtained mean value 3.65 is higher than the ideal mean i.e 3.00. The average response indicates agreement of respondents to the statement.

80% (33% plus 47%) of instructors agreed on item eight that states "when I teach I prepare in advance for my mistake" and 20% were not able decided with the idea. Since the obtained mean value 4.13 is above the ideal mean i.e. 3.00 .The average response indicates agreement of respondents to the statement.

4.4 THE RELATIONSHIP BETWEEN LEARNING AND TEACHING STYLE

Graduate students were asked to rank order about the relationship between learning and teaching style. The following two questions were asked both graduate students and instructors about the relationship between learning and teaching style:

Question-1 the most accepted a criterion for measuring good teaching is the amount of the students learning that occurs.

Question-2 Students are more attracted to teaching styles that complement their learning and personality needs.

Table-9- graduate students' and instructors level of agreement on the relationship between learning and teaching style

Question -1

Instructors

	Response In	SA	A	U	D	SD	Total
Graduate students	Freq.	44	56	5	10	5	120
	%	37	47	4	8	4	100

5=Strongly Agree (SA), A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree

As shown from the above table 84% (37% plus47%) of graduate students and instructors agreed on item that states "the most accepted criteria for measuring good teaching is the amount of the students learning that occurs."4% and 12% were not decided and disagree with the idea respectively.

Table-9.1 graduate students' and instructors level of agreement on the relationship between learning and teaching style

Question -2

Instructors

	Response In	SA	A	U	D	SD	Total
Graduate Students	Freq.	58	53	4	3	1	120
	%	48	44	3	3	2	100

5=Strongly Agree (SA), A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree

As shown from the above table 92% (44% plus48%) of graduate students and instructors agreed on item that states "Students are more attracted to teaching styles that complement their learning and personality needs.."3% and 4% were not decided and disagree with the idea respectively. From the above two table can conclude that there is relation between learning and teaching styles

4.5 TYPES OF TEACHING AND LEARNING STYLES

4.5.1 TYPES OF LEARNING STYLE

Graduate students were asked to level of agreement on the concept of learning style and the following results are shown on table- 10

There are four types of learning style i.e. visual, Auditory, kinesthetic and Tactile types of learning style

4.5.1.1 AUDITORY TYPES OF LEARNING STYLE

Graduate student were asked to level of agreement on the use of tactile type of learning style and the result are shown on table-10

Table -10- Graduate students' level of agreement on the use of auditory types of learning style

No	Item	Response In	SA	A	U	D	SD	Total	Mean
	Auditory								
1	I learn best when I listen and watch carefully	Freq	32	19	2	19	8	80	3.9
		%	40	23	3	24	10	100	
2	when I learn I like to listen to voice ,sounds and speeches	Freq	28	26	3	18	5	80	3.8
		%	35	33	4	22	6	100	
3	when I learn I like to discussion, lecture and mental dialogues	Freq	26	21	7	18	8	80	3.7
		%	33	26	8	23	10	100	
	Grand Mean								3.9

5=Strongly Agree (SA), A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree

As shown from Table-10 - 73 % (40 plus 23) of the graduate students agree on item one that states" I learn best when I listen and watch carefully". Only 3% and 34% were not able to decide with the idea respectively. Thus, the obtained mean value 3.9 higher than the ideal mean i.e. 3.00.The average response indicates agreement of respondents to the statements.

59 % (33 plus 26) of graduate student agreed on item that states "when I learn I like discussion, lecture and make mental dialogues". 8% and 33% were not decided and disagree with the idea respectively. Since, the obtained mean value 3.7 is higher than the ideal mean i.e.3.00. The average response indicates agreement of respondents to the statement.

With regards - 68 %(35 plus 33) of graduate students agreed on item that states "when I learn I like to listen voice, sounds and speeches". Only 4% and 28% were not decided and disagree with the idea respectively. Since, the obtained mean value 3.8 is higher than the ideal mean i.e.3.00 .The average response indicates agreement of respondents to the statement.

4.5.1.2 VISUAL TYPES OF LEARNING STYLE

Graduate student were asked to level of agreement on the use of visual type of learning style and the result are shown on table-11.

Table -11Graduate student's visual level of agreement on the use of Visual types of learning style

No	Item	Response In	SA	A	U	D	SD	Total	Mean
	Visual types of learning style								
1	I learn best when I watch pictures and image	Freq	29	21	6	18	6	80	3.8
		%	36	26	8	22	8	100	
2	when I learn I like to create mental picture in my mind about those pictures	Freq	30	25	2	20	3	80	3.9
		%	38	31	2	25	4	100	
3	when I learn I like to observe person	Freq	27	21	5	21	6	80	3.6
		%	34	26	6	26	8	100	
	Grand mean								3.7

5=Strongly Agree (SA), A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree

With regards to the above table 62 % (36 plus 26) of graduate students agreed on item one that states " I learn best when I watch pictures and image" .8% and 0% were are not able to decide and disagree with the idea respectively. Since, the obtained mean value 3.8 is higher

than the ideal mean i.e.3.00 .The average response indicates agreement of respondents to the statement.

Item -2 69% (38% plus 31%) of Graduate students agreed on item that states "when I learn I like to create mental pictures in my mind about those pictures". 2% and 29% were not decide and disagree with the idea respectively. Since, the obtained mean value 3.9 is higher than the ideal mean i.e.3.00. The average response indicates agreement of respondents to the statement. Item-3 70% (34 plus 26) of Graduate students agreed on item that states" when I learn I like to observe person" .6% and 34% were not able to decide and disagree with the idea respectively. Since, the obtained mean value 3.6 is higher than the ideal mean i.e.3.00 .The average response indicates agreement of respondents to the statement.

4.5.1.3 KINESTHETIC TYPES OF LEARNING STYLE

Graduate student were asked to level of agreement on the use of kinesthetic type of learning style and the result are shown on table-12.

Table -12 - Graduate student's visual level of agreement on the use of kinesthetic learning style

No	Item	Response in	SA	A	U	D	SD	Total	Mean
	Kinesthetic								
1	when I learn I focus on movement	Freq	29	21	6	18	6	80	3.4
		%	36	24	5	21	14	100	
2	I learn best by touching rather than seeing or listening	Freq	30	25	2	20	3	80	3.6
		%	38	16	2	30	14	100	
3	when I learn I like to deal with my feeling	Freq	27	21	5	21	6	80	3.5
		%	29	20	11	31	9	100	
	Grand Mean								3.5

5=Strongly Agree (SA), A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree

With regards to item -1 60% (36 %plus 24%) of the graduate students agreed on item that states " when I learn I focus on movement ".5% and 35% were not able to decide and disagree with the idea respectively. Since, the obtained mean value 3.4 is higher than the ideal mean i.e.3.00. The average response indicates disagree of respondents to the statement.

Item-2 54% (38% plus 16%) of the graduate students agreed on item that states" I learn best by touching rather than seeing or listening". 2% and 44% were not able to decide and disagree with the idea respectively. Thus, the obtained mean value 3.6 is higher than the ideal mean i.e.3.00. The average response indicates disagree of respondents to the statement.

Item- 3 49% (29% plus 20%) of the graduate students agree on item that states "when I learn I like to deal with my feeling". 11% and 40% were not able to decided and disagree with the idea respectively. Since, the obtained mean value 3.5 is higher than the ideal mean i.e.3.00. The average response indicates disagree of respondents to the statement.

4.5.1.2TACTILE TYPE OF LEARNING STYLE

Graduate student were asked to level of agreement on the use of tactile type of learning style and th result are shown on table-13

Table-13- Graduate student's level of agreement on the use of tactile types of learning style

No	Item	Response In	SA	A	U	D	SD	Total	Mean
1	When I learn I like to have Notes during lecture	Freq	32	34	4	9	1	80	4.08
		%	40	43	5	11	1	100	
2	I learn best when I rely On logical thinking	Freq	26	33	4	12	5	80	3.95
		%	33	41	5	15	6	100	
3	When I learn I like to Study something difficult Or new	Freq	31	33	5	10	1	80	4.03
		%	39	41	6	13	1	100	
Grand Mean									4.00

5=Strongly Agree (SA), A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree

In regarding item -1 83 % (40% plus 43%) of the graduate student agree on item that states "when I learn I like to have notes during lecture". 5% and 10% were not able to decide and disagree with the idea respectively. Since the obtained mean value 4.08 is above the ideal mean i.e. 3.00. The average response indicates agreement of respondents to the statements.

Item-2 74% (33% plus 41%) of the graduate student agrees on item that states "I learn best when I rely on logical thinking" .5% and 11% were not able to decide and disagree with the idea respectively. Since, the obtained mean value 3.95 is higher than the ideal mean i.e.3.00 .The average response indicates agreement of respondents to the statement.

Item-3 80 % (39% plus41%) of the graduate student agree on item that states" when I learn I like to study something difficult or new". 6% and 14% were not able to decide and disagree with the idea respectively. Thus, the obtained mean value 4.03 is above the ideal mean i.e. 3.00. The average response indicates agreement of respondents to the statement.

What are the types of learning styles adopted by students of AAU at the graduate program level in college of education and behavioral studies?

Respondents were asked to rank order the different learning styles according to their preferences .The ordering learning style by the grand mean of the four types of learning styles.

Table- 14- graduate students rank ordering of learning style

No	Learning Style	Grand Mean	Rank
1	Auditory	3.9	2nd
2	Visual	3.7	3rd
3	Kinesthetic	3.5	4th
4	Tactile	4.00	1st

Analyses showed that tactile learning style was ranked as first followed by auditory learning style. i.e. tactile and auditory learning style were the majority of graduate student

learning style adopt in educational and behavioral studies and also educational research and development. .

4.5.1 TYPES OF TEACHING STYLE

There are four types of teaching styles i.e. Auditory, tactile, visual and kinesthetic types of teaching style.

4.5.2.1 DEMONSTRATOR TYPES OF TEACHING STYLE

Instructors were asked to level of agreement on the use of demonstrator types of teaching style results are shown on table -15

Table -15- instructors' level of agreement on the use of Demonstrator type of teaching Style

No	Item	Response In	SA	A	U	D	SD	Total	Mean
	Demonstrators								
1	when I teach I act as role model by demonstrating skills and processes	Freq	19	18	3	-	-	40	4.4
		%	47	45	8	-	-	100	
2	Student role is listening to lectures ,note taking and responses to questions upon request	Freq	4	4	5	13	14	40	2.2
		%	10	10	12	33	35	100	
3	I encourage participation Of students	Freq	25	13	2	-	-	40	4.5
		%	62	33	5	-	-	100	
Grand mean									3.7

5=Strongly Agree (SA), A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree

In regards to item -1 almost all 92% (47% plus 45%) of graduate instructor agree on item that states "when I teach I act as role model by demonstrating skills and processes" . 8% were not able decide with the idea. Since the obtained mean value 4.08 is above the ideal mean i.e. 3.00 .The average response indicates agreement of respondents to the statement.

Item-2 only 20% agreed with the idea that states "student role is listening to lectures, note taking and responses to questions upon request". A great majority 68% of the respondent disagree with the idea and 12% were not decide with the idea respectively. Since, the obtained mean value 2.25 is lower than the ideal mean i.e.3.00. The average response indicates disagreement of respondents to the statement.

Item-3 almost all 95% (33plus 35) of graduate instructor agree on item that states "I encourage participation of students". 5% were not decided with the idea. Since the obtained mean value 4.5 is above the ideal mean i.e. 3.00. The average response indicates agreement of respondents to the statement.

4 .5.2.2 FORMAL AUTHORITY TYPES OF TEACHINGS STYLE

Instructors were asked to level of agreement on the use of formal authority types of teaching style results are shown on table -16

Table -16- instructors' level of agreement on the use of formal authority types of teaching

No	Item	Response In	SA	A	U	D	SD	Total	Mean
	Formal Authority								
1	when I teach I feel responsible for providing and controlling the flow of content	Freq	15	17	2	5	1	40	4.00
		%	37	43	5	12	3	100	
2	when I teach I do not require much student participation	Freq	-	-	2	17	21	40	1.5
		%	-	5	-	40	55	100	
3	when I teach I am not concerned with building relationship with my student	Freq	-	-	2	17	21	40	1.5
		%	-	-	5	43	52	100	
	Total								3.00

5=Strongly Agree (SA), A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree

Regards to item-1 80% (43% plus37%) of graduate instructor agree on item that states" whe teach I feel responsible for providing and controlling the flow of content". 5% and 15% were decide and disagree on the idea respectively. Thus, the obtained mean value 4.03 is above the id mean i.e. 3.00 .The average response indicates agreement of respondents to the statements.

Item -2 only 5% of the graduate instructor agrees on item that states "when I teach I do not require much student Participation". Almost all 95% disagree with the idea. Since the obtained mean value 1.5 below the ideal mean i.e. 3.00. The average response indicates disagreement of respondents to the statement.

Item-3 almost all (45 plus 52) of the graduate instructor disagree on item that states" when I teach I am not concerned with building relationship with my student". 5% were not decided with the idea. Thus, the obtained mean value 1.5 below the ideal means i.e. 3.00. The average response indicates disagreement of respondents to the statement.

4.5.1.2 FACILITATOR TYPES OF TEACHING STYLE

Instructors were asked to level of agreement on the use of facilitator types of teaching style results are shown on table -17

Table-17- instructors' level of agreement on the use of facilitator teaching Style

No	Item	Response In	SA	A	U	D	SD	Total	Mean
	Facilitator								
1	when I teach I tend to focus on activities	Freq	17	17	3	1	2	40	4.2
		%	43	42	7	3	5	100	
2	My way of teaching is used to learn how to Use the content in Problem solving way	Freq	8	11	2	12	7	40	3.0
		%	20	27	5	30	18	100	
3	when I teach I design learning situations and activities	Freq	-	18	16	5	1	40	4.1
		%	45	40	-	2	3	100	
	Total								3.9

Regarding to Item -1 85 % (43 plus 42) of the graduate instructors agreed on item that states "when I teach I tend to focus on activities".7% and 8% were not decide and disagree

with the idea respectively. Thus, the obtained mean value 4.2 above the ideal mean i.e. 3.00. The average response indicates agreement of respondents to statement.

Item-2 47% (20 plus 27) of the graduate instructors agreed on item that states" my way of teaching is used to learn how to use the content in problem solving way". 5% and 48% were not decided and disagree with the idea respectively. Since, the obtained mean value 3 is equal to the ideal mean i.e. 3.00 .The average response indicates disagreement of respondents to the statement. Item -3 almost all 95% (45plus 40) of the graduate instructor was agreed on item that states "when I teach I design learning situational and activities". 5% disagree with the idea. Thus, the obtained mean value 4.0 above the ideal mean i.e. 3.00 .The average response indicates agreement of respondents to the statement.

4.5.2.4 DELEGATOR TYPES OF TEACHING STYLE

Instructors were asked to level of agreement on delegator types of teaching and the result are shown on table-18.

Table -18- instructors' level of agreement on the use of delegator type of teaching Style

No	Item	Respons In	SA	A	U	D	SD	Total	Mean
	Delegators								
1	when I teach I place much control and responsibility for learning on individuals or group of students	Freq	14	21	3	1	1	40	4.1
		%	35	53	7	2	3	100	
2	I give chance for students in designing and implementing their own complex learning projects	Freq	18	18	3	1	-	40	4.3
		%	45	45	3	3	-	100	
3	I make the students to work independently or in group	Freq	22	17	1	-	-	40	4.5
		%	55	42	3	-	-	100	

5=Strongly Agree (SA), A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree

In regards to item-1 88 % (35 plus 53) of the instructors agreed on item that states " when I teach I place much control responsibility for learning on individuals or group of student". 7% and 5% were not able to decide and disagree with the idea respectively. Thus, the obtained mean value 4.1 above the ideal mean i.e. 3.00 .The average response indicates agreement of respondents to statement.

Item-2 almost all 90% (45 plus 45) of the graduate instructor agreed on item that states "I give chance for students in designing and implementing their own complex learning projects". Thus, the obtained mean value 4.1 above the ideal mean i.e. 3.00 the average response indicates agreement of respondents to statement.

Item-3 almost all 97% (55plus42) of the graduate students agreed on item that states "I make the student to work independently or in group". Thus, the obtained mean value 4.5 above the ideal mean i.e. 3.00 the average response indicates agreement of respondents to statement.

What are the types of teaching styles adopted by Instructors of AAU at the graduate program level in college of education and behavioral studies and institute of educational research and development?

Respondents were asked to rank order the difference teaching styles according to their preferences .The ordering teaching preference by grand mean of the four types of teaching styles.

Table-19- Instructors ranking order of teaching style

No	Types Of Teaching Style	Grand Mean	Rank
1	Demonstrator	3.7	3rd
2	Formal Authority	3.0	4th
3	Facilitator	3.9	2nd
4	Delegator	4.3	1st

Analyses showed that delegator teaching style was ranked as first followed by facilitator teaching style i.e. the majority of the graduate instructors delegator and facilitator types of teaching style were their first and second choice respectively.

4.6 BENEFITS OF DETERMINING TEACHING AND LEARNING STYLE

Research has shown the uniqueness of different teaching and learning styles and identified the characteristics associated with each style. Although there are benefits to the matching of teaching style and learning style, it appears that this alone does not guarantee greater learner achievement. Age, educational level, and motivation influence each student's learning so that what was once preferred may no longer be the student's current preferred learning style. Teachers need to examine their belief structure regarding education and engage in an "ongoing process of diagnosis, with self and with learners, including observation, questioning, obtaining evaluative feedback, and critical reflection" (Nuckles 2000, p. 6). "Each teacher is unique and can use his or her style to be as effective an educator as possible" (Heimlich and Norland 2002, p. 23). Hence, graduate students and instructors were asked to respond on the benefits of determining teaching and learning styles .Table 20 is distribution of students view on the benefits of determining learning styles.

4.6.1 BENEFITS OF LEARNING STYLESTYLE

Graduate students were asked to level of agreement on the benefits of learning style the result are shown on table-20

Table- 20- instructors' level of agreement on the benefits of Learning Style

No	Item	Options	Response in	
			Freq	%
	Benefits of learning styles			
1	Is there any benefits of determining your learning Style	Yes	61	76
		No	15	19
		Undecided	4	5
		Total	80	100
2	Does your learning style match with instructors teaching style	Yes	19	24
		No	51	63
		Undecided	10	13

Regarding to item-1 76% of the graduate students agreed with the item that states "Is there any benefit of determining your learning style". 15% and 4% disagree and were not able to decide with the idea.

In supporting this idea, one of the graduate students stated as follows:

' ...Yes, because I can prepare the material or things in advance for better understanding and also use to capture one's idea''

(Graduate student: April 24, 2014)

In addition to this, some of the graduate students propped up the idea by saying

'...Yes, it used to cope up with the subjects and handle the subject matter accordingly'

(Graduate student: May 4, 2014)

From the above response, it possible to conclude that there is benefits of determining learning styles.

Item 2 only 24% of the graduate student respondents agreed on item that states "their learning style mach with instructor teaching style". 63% and 13% disagreed and were not able to decide with the idea respectively.

In supporting this idea, one of the graduate students stated as follows:

'... honestly, I haven't seen as such instructors that teach based on my learning style... But I can say there are a few ones.'

(Graduate student: May 14, 2014)

From the above response it is possible to conclude that their learning style of graduate students did not match with the instructors teaching style.

4.6.2 BENEFITS OF TEACHING STYLE

Understanding teaching style would be enhanced if we had a list of elements of style that we use as a basis for examining ourselves .Instructors were asked level of agreement on the benefits of teaching style and the result are shown on table -21

Table-21 instructors' level of agreement on the -Benefits of Teaching Style

No	Item	Options	Response In	
			Freq	**%**
1	Is there any benefit Of determining your teaching Style	Yes	40	100
		No	-	-
		Undecided	-	-
		Total	40	100
2	Do you ask your students learning styles before you teach	Yes	6	15
		No	34	85
		Undecided		-
		Total	40	100

Regarding to item 1 almost all 100% of the graduate students agreed on the benefits of determining their teaching style. In supporting this idea, the graduate instructors said that:

"...it enables the teaching and learning process fruitful or productive. And also used to addressed the various needs of the students"

(Instructor, May5, 2014)

In addition to this idea the instructors propped out idea:

'...as psychologist I know students learn better when the lesson is presented using different styles.'

(Instructor, May, 19 2014)

From the above response it is possible to conclude that there is benefit of determining their teaching style.

Item-2 85% of graduate respondent agreed on item that states "do you ask your students learning styles before you teach". Only 15% agree on the idea. From the above response it's possible to conclude that most of graduate instructors did not ask students learning style.

4.7 FACTORS AFFECTING LEARNING STYLE

As mentioned in the literature part of the study, many factors affecting teaching and learning style .Graduate student identified the major reason for affecting learning style were sex, , and educational background etc.... .The instructors' respondent identified the major reason that affecting teaching styles were teaching experience, workload per hour, age and salary (motivation factor).

4.7.1 GENDER DIFFERENCE IN LEARNING STYLE

Graduate students were asked level of agreement on gender difference in learning style and the following results are shown on table -22

It was expected that male and female graduate students can have different views on their preference to learning styles .They were asked to respond to the following item

Table-22-graduate students level of agreement on Gender difference in learning style

No	Item	Options	Response in	
			Freq	%
1	Is there a difference between learning styles of male and female students	Yes	38	48
		No	32	40
		Undecided	10	12
		Total	80	100

As results shown on table 22 48% of graduate students agree with the idea that states "Is there a difference between learning styles of male and female students". 40% and 12% were not able to decide and disagreed with the idea respectively.

In supporting this idea the graduate student said:

> "...gender could influence how we learn because male and female students grew in a society that gives role to both gender and these roles could influence how

one's learn .That's why male student learn best by doing things because what the society shapes."

(Graduate Students, May 16, 2014)

In addition to this idea:

'... Male and female are different by nature .Male focus on independent learning i.e. individual works but female depends on group works and discussion."

(Graduate Students, May 16, 2014)

From the above response possible to conclude that there is a difference between learning style of male and female students.

Graduate students were asked to level of agreement on concept of learning style difference between male and female students.

Table-23- instructor's agreement on Sex difference in learning style

No	Item	Response In	SA	A	U	D	SD	Total	Mean
1	when I teach I consider female and male learning styles	**Freq**	**6**	**20**	**3**	**8**	**3**	**40**	**3.5**
		%	**15**	**50**	**7**	**20**	**8**	**100**	
Grand Mean									**3.5**

Results are shown on table -25 65% (50% plus15%) of instructors agreed on item that states" when I teach I consider male and female learning style". 28% and 7% disagree and were not able to decide with the idea respectively .Since, the obtained mean value 3.5 above the ideal mean i.e. 3.00 .The average response indicates agreement of respondents to the statement.

In addition to this, the researcher also tests the level of significance between male and female learning style by using SPSS. Independent T-test was used to test learning style difference between male and female students.

Ho: There is no significance difference between learning styles of male vs. female students.

Ha: There is significant difference between learning styles of male vs. female students

Rejecting Ho means accepting Ha .Results are shown on the following table

Table-24-independent t-test`

	Levine's Test for Equality of Variances		***t-test for Equality of Means***						
	F	*Sig.*	*T*	*Df*	*Sig. (2-tailed)*	*Mean Difference*	*Std. error Difference*	*95% Confidence Interval of the Difference*	
								Lower	*Upper*
respondent auditory									
Equal variances assumed	*18.365*	*. 000*	*8.403*	*78*	*.000*	*1.925*	*.229*	*1.469*	*2.381*
Equal variances not assumed									
			8.403	***56.766***	***.000***	***1.925***	***.229***	***1.466***	***2.384***

AS SHOWN FROM THE TABLE-24

$P_{VALUE}=0$ & ALPHA $= 0.05$

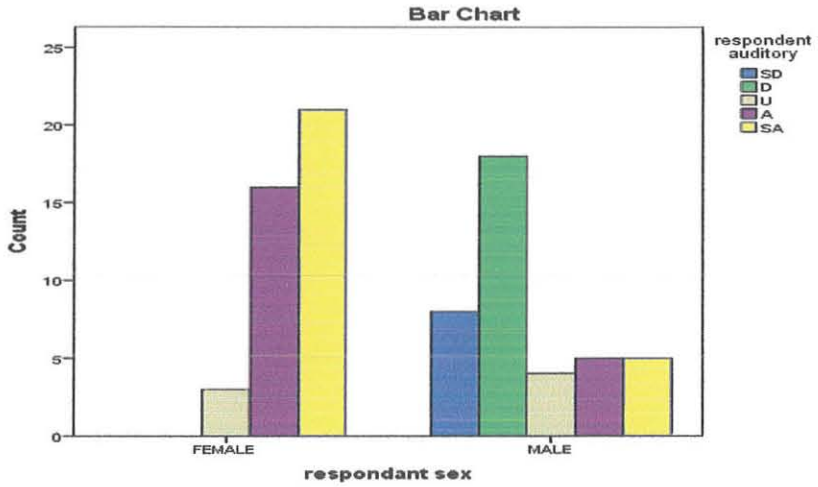
$P_{Value} < \alpha$ .i.e. rejecting the Ho

Rejecting Ho means accepting Ha. As shown from table 24, it's possible to conclude that there is significance difference between learning styles of male Vs female graduate students.

Male and Female graduate students were asked on their choices of learning styles. Percentage distributions of responses along a five point scales were computed for the two groups and

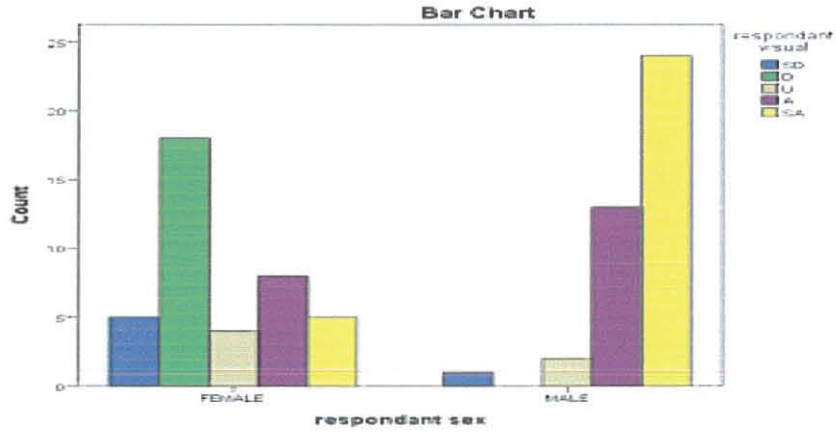
Statistically put using Bar graphs. The results are shown on the following Bar graph:

Graph-1 Auditory type of learning Style



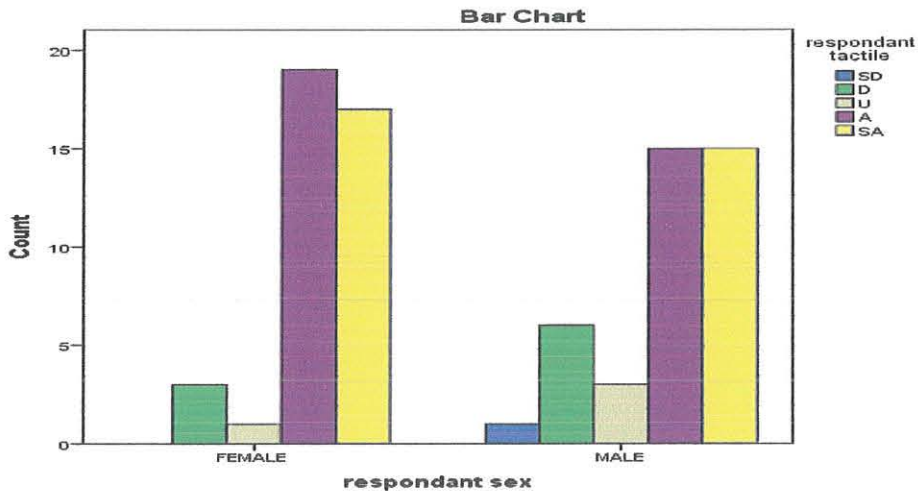
Results are shown on the Bar graph-1; with regard to auditory types of learning styles female students had high percentage choice than male.

Graph- 2 Visual type of learning Style



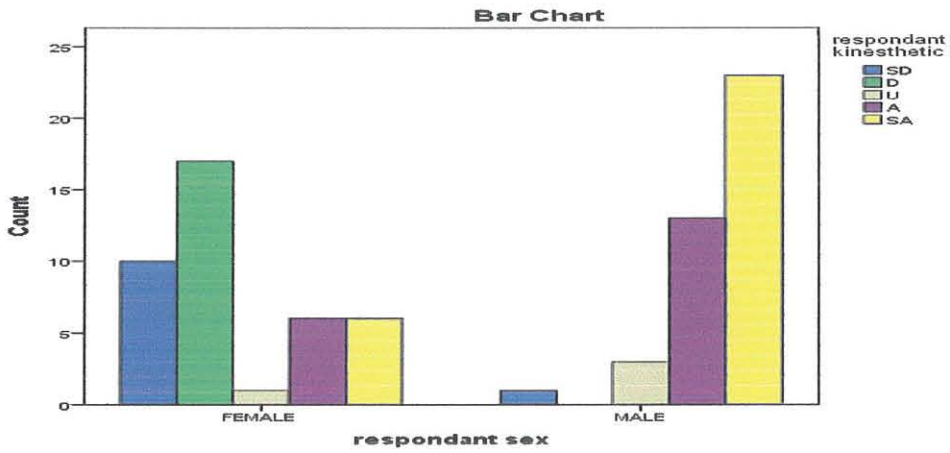
Results are shown on the Bar graph-2; with regard to visual types of learning styles male students had high percentage choice than female.

Bargraph-3 Tactile type of learning Style



Results are shown on the Bar graph-3;with regard to tactile types of learning styles female students had high percentage choice than male.

Bargraph-4 Kinesthetic type of learning Style



Results are shown on the Bar graph-4;with regard to kinesthetic types of learning styles male students had high percentage choice than female.

With regard to the above bar graphs can conclude that tactile and auditory types of learning style preferred by the majority of female graduate students in the sampled institutions. While kinesthetic and visual types of learning styles preferred by the majority of male graduate students in the sampled institutions.

4.7.2) DOES FAMILY BACKGROUND AFFECT LEARNING STYLE?

The graduate student were asked to level agreement on the effect of family background on learning style the following results are shown on table-25

Table – 25-graduate student's level of agreement on family background

No	Item	Response in	SA	A	U	D	SD	Total	Mean
	Student background								
1	Family background affect s students learning style	Freq	39	28	4	4	5	80	4.15
		%	49	35	5	5	6	100	
2	When I teach recognize students Family background	Freq	17	18	1	3	1	40	4.18
		%	42	45	3	-	-	100	
	Grand mean								4.14

5=Strongly Agree (SA), A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree

With regards to the table-27 84 % (49% plus35%) of Instructors agreed on the item-1 that states "Family background affects students learning style" and 5% and 11% were not able to decide and disagree with the idea respectively. Since, the obtained mean value 4.15 above the ideal mean i.e. 3.00. The average response indicates agreement of respondents to the statement.

Almost all 97% of instructor agreed on the item -2 that states "when I teach I recognize student background". Only 3% were not able to decide with the idea. Since, the obtained

mean value 4.18 above the ideal mean i.e. 3.00. The average response indicates agreement of respondents to the statement.

4.7.3 THE RELATIONSHIP BETWEEN TEACHING STYLES AND INSTRUCTORS BACKGROUND

There are many factors that affect teaching style. But the researcher wants to show:

Is age and teaching experience related to teaching style?

Multiple regressions were used to test the level of significance between teaching style due to teaching experience and age in sampled institutions. The dependent variable is teaching styles and the independent variables are age and teaching experience. $Y=a+b_1x_1+b_2x_2+e$

Table-26 correlation between teaching style due to age and teaching experience

		respondent teaching style	respondent age	respondent teaching experience
Respondent teaching style	Pearson Correlation	1	-.228*	-.394*
	Sig. (1-tailed)		.021	.000
	N	40	40	40
respondent age	Pearson Correlation	-.228*	1	.112*
	Sig. (1-tailed)	.021		.025
	N	40	40	40
respondent teaching experience	Pearson Correlation	-.394*	.112*	1
	Sig. (1-tailed)	.000	.025	
	N	40	40	40

The above table shows there is significant relation between teaching style due to age and teaching experience. Thus, teaching style relate to age and teaching experience.

Table-27 ANOVA of age and teaching experience

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	400.9	2	20.45	73.05	.000[b]
	Residual	190.987	37	2.480		
	Total	591.887	39			

ANOVA Table shows the independent variables (age and teaching experience) do a good job explaining the variation in the dependent variable. As result shown on table – 27- there is significant relation between teaching style and age. And also the regression sum of square larger than residual sum of square this indicates the model accounts most variation in the dependent variable. Age and teaching experience are good determinants of teaching style.

Table-28 coefficient of age and teaching experience

Model	Un standardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	3.250	.676		4.805	.000
Instructors age	1.830	.232	.465	.563	.000
Instructors teaching experience	2.904	.357	1.934	1.292	.000

a) Dependent variable: respondent teaching style

The coefficients indicate the increase in the value of the dependent variable for each unit increase in the predictor variables.

To determine the relative importance of significant predictors, look at the standard coefficient of instructor's age (.465) has small coefficient compared to instructors teaching experience (1.934); so that teaching experience contributes more than because it has larger absolute standardize coefficient.

Multiple regression models

Table-29 model summary of age and teaching experience

Model	R	R Square	Adjusted Square	R Of The Estimate
1	.803[a]	.644	.644	81.940

a. predictors: (constant), respondent age, respondent teaching experience

$R=.803$, $R^2=.644$

R is higher than 0.5 i.e. it's closer to one. 0.8 > 0.5. So it is positive (+ve)

R shows positive correlation (relationship) teaching style due to age and teaching experience.

64% of the variance of teaching style are explained by age and teaching experience.

Both graduate students and instructors were asked "what are the problems that affects quality of teaching learning in Addis Ababa university"

To analyze the interviewed graduate student and instructors were listed some problems related to the teaching and learning process. The researcher gave rank for improvement or bring quality of education of teaching and learning. Level mentioned by graduate student and instructors:

1) Mismatch between learning and teaching style
2) Learning style difference
3) Types of teaching style
4) Commitments of instructors

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMANDATIONS

This final chapter of thesis deals with the summary of the major findings of the study, conclusions and recommendations.

5.1 MAJOR FINDINGS OF THE STUDY

The purpose of the study was to assess the teaching and learning style at the graduate program level in Addis Ababa University and to forward some alternative solutions or recommendations that may reduce or improve the problem of quality of teaching and learning. To this effect, the following basic questions were used as a frame of reference for the study.

1) What are the dominant types of learning styles and teaching styles adopted by students and instructors respectively of AAU at the graduate program level in the sampled institutions?
2) Is there a relation between teaching and learning styles in Addis Ababa University at the graduate program level in the sampled institutions?
3) What are the benefits of determining students learning styles and instructors teaching styles in AAU at the graduate program level in the sampled institutions?
4) Is age and teaching experience related to teaching style?
5) Does family background affect the learning style of the graduate student?

Based on the basic questions major findings of the study are presented below.

Conceptualization of teaching and learning style

The finding of the study showed that there is benefit of determining learning and teaching style

Types of teaching and learning styles

It was found out that tactile types of learning style was a learning style preferred by the majority of graduate students in the sampled institutions and Delegator types of teaching style was a teaching style of majority of instructors first choice in the sampled institutions.

The mean difference was found out between types of learning styles and types of teaching style that are adopted in Addis Ababa university in the sampled institutions.

Relationship between learning and teaching style

The finding of the study showed that there is learning style difference between male and female Graduate students in the sampled institutions.

It was found out that there is mismatch between students learning styles with instructors teaching styles in the sampled institutions.

It was found out that instructors were not asked students learning style before they teach in the sampled institutions.

Factors affecting learning and teaching style.

The study also showed that there is significant mean difference between teaching style due to teaching experience and age in the sampled AAU. And there is learning style difference between male and female Graduate students and also due to family's educational background.

5.2 CONCLUSIONS

Based on the summary of the findings of the study the following conclusions were drawn:

The following similarities have been noted;

From the finding it can be concluded that; Learning and Teaching styles are related variables that play important roles. There are different types of learning styles (Auditory, Visual Tactile and Kinesthetic). The majority of Graduate students adopt Tactile and Auditory types of learning style as their first and second choice respectively. There are different types of teaching style (Facilitator, Delegator, Formal Authority and Demonstrator). The majority of the instructors adopt Delegator and Facilitator types of

teaching style as their first and second choice respectively. There are many advantages of understanding the way in which instructors teach and also able to process information most efficiently. The finding shows that there is benefit of determining learning and teaching styles. There is statistically positive relation between Teaching style due to age and teaching experience.

The following differences have been noted:

From the finding it can be conclude that; It was found out that there is learning style difference between male and female Graduate students. The majority of Graduate Male student's preferred Visual and Kinesthetic types of learning style as their first and second choice respectively; On the contrary, for the majority of Graduate female student's Auditory and Tactile types of learning style were their first and second choice respectively. There are many factors that affect learning style. It was found out that there learning style difference due to student background and sex. There are many factors that affect teaching style. It was found out that there is teaching style difference due to age and year of experience of instructors. The higher the β of the independent variable the higher effect on dependent variable. Teaching experience has high effect on teaching style than age. That is because the β of teaching experience was higher than age. Understanding the learning style difference has a great role in quality of teaching. But it was found out that the majority of instructors are not considering male and female learning difference type of teaching styles influences students learning styles. The majority of instructors do not ask students learning styles before they start teaching. With this regards, majority of graduate students learning style mismatch with instructors teaching styles.

5.3 RECOMMANDATIONS

On the basis of the findings and conclusions of the study the following recommendations were given in the study.

1) In order to help students to achieve better, the instructors teaching method must match with the learning style of the students.

2) Before deciding on any one teaching method, instructors should be clear with the learning aims and intended outcomes.

3) Salary scale has to be revised and upgrade in order to make teaching an attractive profession and also make the instructors motivated for their job.

4) There should be communication between Graduate students and instructors to bring quality of education and bring qualified students.

5) Teaching style should be improved in such a way that students are encouraged in questioning, creative thinking and problem solving.

6) As noted earlier, Instructors in the study area were not considering the learning style difference between male and female. Hence, it is advisable for instructor take into consideration learning style difference before giving lesson.

7) The researcher believes that an intensive research on learning and teaching study in all Ethiopian university is necessary

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Appendix -1

Addis Ababa University

School Of Graduate Students

Questionnaire to Be Filled By Graduate Students

Dear Graduate Students,

The following questionnaire is designed to gather information for a research that is going to be carried out on a title of teaching and learning style at the graduate program level at Addis Ababa university .I would like to express my thanks and appreciation for your time and sincere cooperation to fill these questionnaire .please do not put your name on the questionnaire since all the response are confidential .your response will not be used for any other purpose except for this research.

Many Thanks in Advance for Your Cooperation !!

PART ONE: Background Information

1) Department.....

2) Sex ○Male ○Female

3) Age.....

4) Marital Status ○Single ○Married

5) Family Educational Level.....

6) Class in Credit per Hour per Week ○ 6 ○ 7-11 ○ 13-18

PART TWO

Put a mark in the space provided in front of each item. There are five alternatives and their value is indicated as follows. 5=Strongly Agree, 4=Agree, 3=Undecided, 2=Disagree, 1= Strongly Disagree

		SA	A	U	D	SD
	1.learning style					
1.1	learning style is a general preference for learning					
1.2	Students have different learning styles					
1.3	Each individual may possess a single or a Combination of different style					
	2. The relationship between learning and teaching style					
2.1	Teaching and learning are two sides of coin					
2.2	The most accepted criterion for measuring good teaching is the amount of the student Learning occur					
2.3	Styles influences how student learn and How teacher teach and how the two interact					
2.4	Students are more attracted to teaching styles That complement their learning and Personality needs					
3	Perceptual learning style					
3.1	Auditory types of learning style					
3.1	I learn best when i listen and watch carefully					
3.1	When I learn I like to listen to voice ,sounds And speeches					
3.1	When I learn I like to discussion ,lecture and Make mental dialogues					
3.1	When I learn I like to listen and speak					
	3.2 visual learning style					

3.2	When I learn I like to watch pictures and images					
3.2	When I learn I like to watch and see					
3.2	When I learn I like to create mental pictures in My mind about those concepts.					
3.2	When I learn I like to observe person					
3.3						
3.3	When I learn I focus on movement					
3.3	When I learn I like to deal with my feeling					
3.3	I learn best by touching rather than seeing Or listening					
3.4						
3.4	When I learn I like to have some notes During lectures					
3.4	When I learn I like to study something difficult Or new					
3.4	when I learn I like to draw or doodle to remember					
3.4	I learn best when I rely on logical thinking					
4.1	In my opinion generally male learn best by touching things and observing					
4.2	In my opinion generally female learn best listen And watch carefully.					
4.3	Family background affects students learning style					
4.4	Information processing and perception are Biologically predetermined					

PART THREE

'Yes' or 'no' question

1) Is there a difference between learning styles of male and female students?
2) Is there any benefit of determining your learning styles? if yes how?
3) Which types of learning style that you learn best?
4) Does your learning style match with instructors teaching style?

N: B there are different types of learning style but, this four modalities (auditory, visual, kinesthetic and tactile) are very simple in understanding, as every person can understand this learning style model due to its clear concepts.

N: B visual- learning by seeing, auditory-learning by hearing, kinesthetic-learning by feeling and tactile: learning by doing.

Appendix -2

Addis Ababa University

School Of Graduate Studies

Questionnaire to Be Filled By Graduate Instructors

Dear Instructors,

The following questionnaire is designed to gather information for a research that is going to be carried out on a title of teaching and learning style at the graduate program level at Addis Ababa university .I would like to express my thanks and appreciation for your time and sincere cooperation to fill these questionnaire .please do not put your name on the questionnaire since all the response are confidential .your response will not be used for any other purpose except for this research.

Many Thanks in Advance for Your Cooperation !!

PART ONE: Background Information

1) Department.....

2) Sex.....

3) Age.....

4) Marital Status.....

5) Teaching experience.....

6) Class in Credit per Hour per Week.....

PART TWO

Put a mark in the space provided in front of each item. There are five alternatives and their value is indicated as follows.

5=Strongly Agree, 4=Agree, 3=Undecided, 2=Disagree, 1= Strongly Disagree

		SA	A	U	D	SD
	1. Teaching Style					
1.1	When I teach I take advantage Of available recourses					
1.2	When I teach I anticipate and understand Student attitude					
1.3	When I teach I prepare in advance For my mistake					
1.4	When I teach I make it fun					
	2 types of learning style					
	2.1demonstrator					
2.1.1	When I teach I act as role Model by demonstrating Skills and processes					
2.1.2	I encourage participation of students					
2.1.3	In my opinion students role is Listening to lectures , not taking and responses to questions Upon request.					
	2.2 formal authority					
2.2.1	When I teach I feel responsible					

	For providing and Controlling the flow of content					
2.2.2	When I teach I do not require Much student participation					
2.2.3	When I teach I am not concerned With building relationship with my students					
	2.3 Facilitator					
2.3.1	When I learn I tend to focus on activities					
2.3.2	My way of teaching is used to learn How to use the content in problem Solving way					
2.3.3	When I teach I design learning situations And activities					
	2.4 delegators					
2.4.1	When I teach I place much control And responsibility for Learning on individuals or group of students					
2.4.2	I give chance for students in designing And implementing Their complex learning projects					
2.4.3	I make the students to work independently Or in groups					
	3 .the relationship between learning And teaching style					
3.1	The most accepted criteria for measuring Good teaching is the amount of the student learning that occurs					

Appendix-3

Addis Ababa University

School of Graduate studies

Interview of Graduate instructors

Dear interviewee! The purpose of this interview is to collect data about the teaching and learning at the graduate program level at Addis Ababa University. The types of information that you will provide determines the quality of study. And please be sure that the information you will forward is used only the afore mentioned academic purpose .you, are kindly, requested to be genuine and honest in providing the factual information in the course of interview.

Thank you in advance for your cooperation!!!

From-1 interview

1) Please tell me your qualification, work experience and duration on the current position?

2) Is your learning style incorporates the learning style of student?

3) The reason for not incorporating learning style in your teaching style?

4) What are the problems that affect quality of teaching learning in Addis Ababa University?

5) Is there any benefit of determining your teaching styles? If yes how

	the amount of the student learning that occurs					
3.2	Students are more attracted to teaching Styles that Complements their learning and Personality needs					
3.3	My way of teaching creates learners' Interest, enthusiasm and appreciation					
3.4	When i teach i consider male and Female learning style					
3.5	My teaching style is best in addressing The needs of students					
3.6	When i teach i consider learning Objectives or outcome to be achieved					
3.7	I use various methods of teaching to teach					
3.8	Most instructors use lecture method Because it's the method they know it well					
3.9	I recognize my student background Knowledge and existing skills					

PART THREE

'YES' Or 'NO' Question

1) Is There Any Benefit Of Determining Your Teaching Styles? If Yes How

2) Which Types Of Teaching Style You See Frequently To Teach Students? Why?

3) Do You Ask Your Student Teaching Learning Styles Before You Teach? If Yes? What Is The Use?

4) What Teaching Method Do You Think Is Best For Teaching?

Appendix-4

Addis Ababa University

School Of Graduate Studies

Interview of Graduate Students

Dear Interviewee! The purpose of this interview is to collect data about the teaching and learning at the graduate program level at Addis Ababa University. The types of information that you will provide determines the quality of study. And please be sure that the information you will forward is used only the afore mentioned academic purpose .you, are kindly, requested to be genuine and honest in providing the factual information in the course of interview.

Thank You in Advance for Your Cooperation!!!

From-1 Interview

1) Please tell me your qualification, work experience and duration on the current position?

2) Is there any benefit of determining your learning styles? If yes how?

3) Does your learning style match with instructors teaching style?

4) Is there a difference between learning styles of male and female students? If yes how

5) What are the problems that affect quality of teaching learning in Addis Ababa University?

DECLARATION

This thesis is my original work and has not been presented for a master degree in other university and that all sources of material used for the thesis have been duly acknowledged.

Name of the candidate: Meskerem Berhanu

Signature: .....

Date: .....

This thesis has been submitted for Examination with my approval as a university advisor.

Name of advisor: Dr Girma Lemma

Signature: .....

Date of Submission: .....