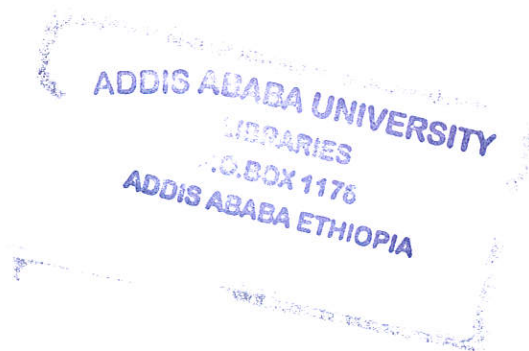


ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
INSTITUTE OF EDUCATIONAL RESEARCH

Approach to Teaching and Learning in Higher Education and Its Implication
for Quality Education: The Case of Mizan-Tepi University

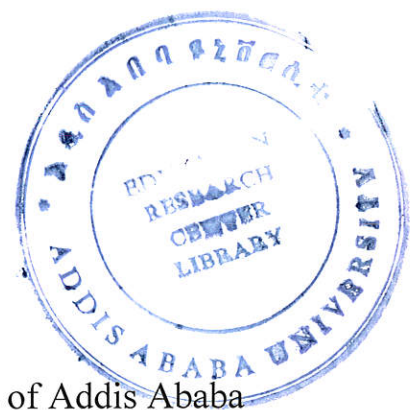
By:
Matheas Shemelis



January 2011

Approach to Teaching and Learning in Higher Education and Its Implication
for Quality Education: The Case of Mizan-Tepi University

By:
Matheas Shemelis



A Thesis Submitted to School of Graduate Studies of Addis Ababa
University in Partial Fulfillment of the Requirements for the Degree of
Masters of Arts in Educational Research and Development

ADDIS ABABA UNIVERSITY
LIBRARIES
P.O. BOX 1176
ADDIS ABABA ETHIOPIA

January 2011



ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
INSTITUTE OF EDUCATIONAL RESEARCH

Approach to Teaching and Learning in Higher Education and Its Implication
for Quality Education: The Case of Mizan-Tepi University

By:

Matheas Shemelis

Approved by the Board of Examiners

Name	Signature	Date
<u>Lesalegn Chalchisa</u> Chairman, Institute Graduate Committee	<u></u>	<u>14/02/11</u>
<u>Derebssa Dufera (prof)</u> Advisor	<u></u>	<u>14/02/11</u>
<u>Lesalegn Chalchisa</u> Examiner	<u></u>	<u>14/02/11</u>

ADDIS ABABA UNIVERSITY
LIBRARIES
P.O. BOX 1175
ADDIS ABABA ETHIOPIA

ACKNOWLEDGEMENTS

My heartfelt gratitude goes to my advisor Prof. Derebssa Dufera for his valuable remarks and unreserved support through out the course of this study. Particularly, the constructive comments and criticisms that have been given by reading critically all the paper and making them ready for me to make all the necessary improvement on time, are the best qualities in my advisor's personality that I always appreciate.

I also wish to extend my thanks to Addis Ababa University, Office of the Vice President for Research and Dean of Graduate Program for providing financial support that was indispensable for the successful accomplishment of this study. I also forward my thanks to all teachers and students of Mizan-Tepi University for their participation in the study and provision of data. Credit must also be given to my colleague Eyoel Nigussie for helping me in the collection of data.

My gratitude also goes to my mother Birke Dhabi, my sisters Etenesh, Meseret, Almaz, Amri and my brother Demeke Shemelis for their moral encouragement in doing the study.

ABSTRACT

The main purpose of this study was examining the extent to which teachers and students of Mizan-Tepi University adopt a desirable (high quality) teaching and learning approach. The study was concurrent explanatory in its design of mixed approach. The study made use of questionnaire and interview as a tools for data collection. From 66 teachers and 212 students data were analyzed with correlation, multiple regression and cluster analysis. Comparison between and among groups also made using independent t-test and ANOVA. Teachers' approach to teaching and bringing good practice of teaching were related significantly. Similarly the correlation between students' perception of their learning environment and the approach to learning showed a significant relationship. Beside this, Workload ($\beta=-0.456, t=-4.534, p<0.001$) and professional course ($\beta=0.378, t=3.763, p<0.001$) were important predictors for teachers' adoption of desirable teaching approach. Having less workload and pedagogical skills of teaching, will lead to adopt high quality teaching approach and bring good practice of teaching. Variables like experience, qualification, gender and faculty did not influence teachers to practice teaching in its desirable approach. Good teaching ($\beta=0.348, t= 4.281, p<0.001$), Generic skills ($\beta=0.297, t= 3.653, p<0.001$) and appropriate workload ($\beta=0.187, t= 3.484, p<0.01$) contributed significantly to the variance of adopting high quality learning approach. An environment which have good teaching, generic skills and appropriate workload, encourage students to adopt a desirable learning approach. Finally, 61% (n=40) of teachers in the sample have adopted a desirable (high quality) teaching approach and they are bringing good practice while the rest 39% (n=26) practicing in its low quality. Similarly, 75% (n=158) of students in the sample perceived their learning environment as supportive of their learning and adopted a desirable (high quality) learning approach while 25% (n=54) perceived their learning environment as less supportive and adopted a low quality learning approach. This implies that, the majority of staffs and students are in a position of practicing quality teaching and learning in line with the criterion set by HERQA. To sustain this practice, all the stakeholders of the teaching learning process (management body, teachers and students) should play their role.

TABLE OF CONTENTS

Content	Page
Acknowledgements.....	I
Abstract.....	II
List of tables	V
Acronyms.....	VI
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the study	1
1.2 Statement of the problem.....	6
1.3 Objectives of the study	7
1.4 Significance of the study	8
1.5 Delimitation of the study	8
1.6. Limitation of the Study	9
1.7 Definition of basic terms	9
1.8 Organization of the study.....	10
CHAPTER TWO: REVIEW OF RELATED LITERATURE.....	11
2.1. Higher education and their purpose	11
2.2. The Concept of Quality Education	11
2.3. Teaching-Learning in Higher Education	12
2.3.1. Theories of teaching in higher education.....	13
2.3.2. Approaches to Teaching	15
2.3.3. Effective Teaching.....	19
2.3.4. Theories of learning.....	24
2.3.5. Learning in higher education	26
2.3.5.1. Conceptual model for teaching and learning in higher education.....	29
2.3.6. Approaches to learning	32
2.3.6.1. Deep Approach:	34
2.3.6.2. Surface Approach	34
2.4.7. Measuring approaches to teaching and learning.....	35

CHAPTER THREE: METHODS	37
3.1. Population and samples of the Study	37
3.1.1 Population	37
3.1.2 Sample, sampling technique and procedures	38
3.2. Data gathering instruments and procedures.....	39
3.3. Methods of data analysis	43
CHAPTER FOUR: RESULTS	46
4.1. Background characteristics of respondents	46
4.2. Analysis of data for teachers.....	48
4.3. Analysis of data for students.....	58
CHAPTER FIVE: DISCUSSIONS	69
5.1 Teachers conception of teaching	69
5.2 Good practice of teaching and learning	73
5.3 Students perception of learning environment	77
5.4 Students approach to learning.....	79
5.5 Relationship between perceptions of learning environment and learning approach.....	81
5.6 Problems challanging the adoption of high quality teaching and learning approach-----	82
5.7 Implication for quality education.....	84
CHAPTER SIX: SUMMARY, CONCLUSIONS AND RECOMENDATIONS .	86
6.1. Summary	86
6.2. Conclusions.....	89
6.3. Recommendations.....	90
REFERENCES	92
APPENDICES	

LIST OF TABLES

Table 1. Background characteristics of teachers in the sample	46
Table 2. Demographic Characteristics of students in the sample	47
Table 3. Descriptive statistics for main variables in the study	48
Table 4. Correlation between components of approach to teaching, the good practice of teaching and teachers background inform	49
Table 5. Multiple regression analysis of the variables predicting High High quality of teaching.....	52
Table 6. Summary of t-test for the difference in qualification for adopting HQTA and bringing good practice of teaching-----	54
Table 7 .Summary of t-test for knowledge of professional courses in adopting HQTA and bringing good practice of teaching-----	55
Table 8. ANOVA summary statistics in workload difference for adopting HQTA and bringing good practice -----	55
Table 9. ANOVA summary statistics for experience difference in adopting HQTA and bringing good practice of teaching-----	56
Table 10. Mean (and standard deviation) cluster scale Z-scores for HQTA, approach to teaching and components of good practice	57
Table 11. Correlation between CGPA, context of learning and Learning approach.....	58
Table 12. Correlation between components of learning environment and learning approach	60
Table 13. Multiple regression analysis of the variables predicting high quality of learning approach	62
Table 14. Summary of t-test for gender difference in perception of learning environment and adoption of HQLA-----	63
Table 15. ANOVA summary statistics for CGPA difference in perception of learning environment and adoption of HQLA-----	64
Table 16. Mean (and standard deviation) cluster scales Z-score for HQLA, approach to learning and components of learning environment	66

ACRONYMS

ATI: - Approach to Teaching Inventory

CC/SF: - Conceptual Change/ Student Focused

CEQ: - Course Experience Questionnaire

CGPA: - Cumulative Grade Point Average

ETS: - Educational Testing System

HERQA: - Higher Education Relevance and Quality Agency

HQLA: - High Quality Learning Approach

HQTA: - High Quality Teaching Approach

IMHE:-Institutional Management in Higher Education

MTU: - Mizan-Tepi University

OECD: - Organization for Economic Cooperation and Development

PPMC: - Pearson Product Moment Correlation

SPSS: - Statistical Package for Social Science

R-SPQ-2F:- Revised Study Process Questionnaire of the Two Factor

CHAPTER 1: INTRODUCTION

1.1 Background of the study

Higher education is becoming a major driver of economic competitiveness in an increasingly knowledge driven global economy (OECD, 2009). According to Daniel (2004, p.63), “higher education institutions are expected to produce graduates capable of bringing about changes and improvement in the society”. Due to this, like the rest of the world, Ethiopia also gave a due attention for the expansion of higher education across the country. With this respect, graduates of these institutions are expected to be well equipped with knowledge, skill, understanding and attitude in order to serve the society effectively.

The quality of education takes the central idea in all educational institutions including higher education. The concept of quality education by its nature is very broad and it is too difficult to measure from few angles and to define precisely. However, there are many indicators, by which effective accomplishment of them can lead to infer the quality of education. The Higher Education Relevance and Quality Agency (HERQA) in Ethiopia has designed different criteria to ensure the quality of education in higher institutions. It has also proposed focus areas through which the quality of education can be ensured; some of these include governance and management system, infrastructure and learning resources, program relevance and curriculum, teaching-learning process, research and outreach activities and the like.

The imperative for countries to improve employment skills calls for quality teaching within the educational institutions. This is to mean that, more than others, the teaching learning process is very determinant in ensuring quality education. According

to OECD (2009) quality education might stem from the internal quality assurance systems that regard teaching as one of the pillars of quality along with research and management.

Since the teaching learning process plays a paramount role in ensuring the quality of education, it should be given a due attention for its effectiveness. There may not be single definition for what effective teaching is, but scholars agree on the idea of active engagement of students in the teaching learning process and teachers' effort to promote their learning leads to effective teaching. "Effective teaching is about bringing effective and meaningful students learning" (Hativa, 2000, p.6). Similarly, Ramdsen (1992, p.87) viewed good teaching as "striving continually to learn about students understanding and the effect of teaching on it". Therefore, teaching should stimulate students' curiosity and active learning, encouraging students' analytical, logical and creative thinking, and increase both their desire and capacity for future learning.

The effectiveness of the teaching learning process in higher education are of considerable interest to students, teaching staff , researchers, employers and the society at large. The quality of teaching does not only affects students performance but also the beneficiaries of the graduates' knowledge in the world of work. Students must pass through effective teaching in order to serve the society as intended. This becomes real when the teaching learning process is monitored and improved.

The teaching learning process in higher education needs to encourage the students to actively participate in the process. Biggs (1996) and (2003), Ramdsen (1992) and (2003), Kember (1996) have forwarded their view about the contribution

of students' involvement in their learning on their actual performance. This views lie on the assumption that students will learn more when they are actively engaged in the teaching learning process and when they have given guidance and feedback by their teachers. HERQA also proposed many criteria through which effective teaching and learning can occur. These criteria highly focus on the involvement of students in the process and teachers emphasis to employ different techniques during teaching and assessing students learning. Beside this, the approach students adopt in their learning contributes a lot for their performance in the school and in their world of work. With this regard, teachers' reflection on quality teaching in Ethiopia higher education by Daniel (2004) raised students learning approach as one problem for quality education.

The role teachers' play in the teaching learning process is vital. They are the one who closely monitor students' progression and adopt different mechanisms to enhance their learning. They are also agents who expose children's with new world and guide them how to deal with it. "No matter how good the curriculum may be and how well it is organized, and whether or not teaching materials are available, ultimately the quality of education rests mainly on the methodology of instruction employed by the teachers" (Yalew, 2004, p.18).

Teachers are also responsible to link assessment with the teaching and learning, which is a key for the improvement of the practice. The view teachers have for the purpose of assessment weather "assessment of learning" (assessing the product of learning) or "assessment for learning" (assessing for improvement of learning) highly influences the teaching practice and students learning. As Stiggins (2004) viewed, "for teaching staff, recognizing the potent effects of assessment requirements

on student study habits and capitalizing on the capacity of assessment for creating preferred patterns of study is a powerful means of reconceptualizing the use of assessment". According to Educational Testing System (ETS) (2003), what teachers assess, how they assess and how they communicate the results send a clear message to students about what worth learning, how it should be learned and how well teachers expect them to perform.

Similarly, the way teachers teach their students, influence them with regard to their style of learning, level of understanding and finally their performance. According to Wilkonsin as cited in Walker (2006):

How we teach reflects our respect for the students, our commitment to the academic community and our responsibility for the world...our commitment to our community entails inculcating in the students an enjoyment of the pursuit of difficulty so that they reach the highest intellectual level of which they are capable (p.5).

Therefore, teachers must play a vital role in linking or reinforcing teaching, learning and assessment. This could be done through adopting an approach which enables students to participate actively in the process and to benefit more from it. These help teachers to improve the teaching practice and enhance students learning.

Students on the other side contribute a lot for the betterment of the teaching learning process. The effort they put and the approach they follow in their learning is highly related to their achievement. As Pace in Hativa (2000,) suggested, the largest contributor to students learning gains at the post secondary level is the effort they put into their work. Beside this, the approach adopted by students in their learning

influences their achievement. According to Toohey in Daniel (2004, p.64) “Students gain understanding when they have motive to adopt a deep approach to learning”. On the other hand, students adopting a surface approach are primarily interested in meeting the demands for showing passing grades. Since students are expected to solve the societies’ problem under different context, they need to have understanding on the nature of that particular issue, rather than mere knowing of facts or principles. According to Walker (2006):

Understanding is more significant than to know what. Therefore, to learn how to explain things or events is to be able to grasp the principles which underlie and make sense of their working, and thus to enable us to recognize their occurrence on some future occasion even though the surface characteristics appear to be different (p.23).

The context of the environment in which students learn, highly determines which approach of learning to adopt. The way of teaching employed by staffs, will create different learning environment for students in each department, which results different level of learning. Therefore, to bring the desired quality of teaching and learning, teachers and students should focus on techniques which results a higher level of learning. This highly related with teachers approach to teaching (conception and actual practice of teaching) and students learning approach.. All the above key issues show that, teachers and students are very important to determine the effectiveness of the teaching learning process by adopting good approach in their teaching and learning.

1.2 Statement of the problem

The society and employers need graduates capable of solving problems in the real life of the society. This becomes true when higher education institutions prepare students, who are well equipped with knowledge, skill, understanding and attitude. Mere knowing of facts or principles in their learning may not enable them to perform their activities as intended. Students of higher education should be encouraged to focus on “understanding in their learning” and they have to have the ability to apply it in different context at their work place. To affirm this, the role teachers play in creating a conducive environment for students learning, integrating the teaching learning process, promoting students learning and the like are described through the approach they adopt. Beside this, students must play their part in devoting their time for learning and through active involvement in the process. Even though, scholars recommend these key issues for effective teaching learning process in higher education, instructors and students may not give attention to implement it in their practice.

Currently, at Mizan-Tepi University, there is a great agenda of improving the teaching learning processes through active participation of students in the process. Daniel (2004) also posited students learning approach as one problem of quality from teachers’ perspective. In the teaching learning process the approach followed by both teachers’ and students’ create a great impact on the quality of students learning.

In my stay at Mizan_Tepi University as instructor’ and discussions with my colleagues, most teachers focus to cover the course content within the given time while students are paying a due attention to score high marks on the exam regardless

of the quality of students learning. This kind of teaching and learning approach contributes little for quality education with regard to modern pedagogy. This calls the higher education community (teachers' and researchers) to evaluate the way teachers teach their students and students' approach to learning. Therefore, examining the approach adopted by Mizan-Tepi University teachers and students in the teaching learning process and looking its implication for quality education is the concern of this study. To this end, the researcher posed the following research questions.

1. To what extent do teachers are adopting desirable (high quality) teaching approach?
2. To what extent do teachers' are effective in bringing good practice of teaching in the University?
3. How students perceive the environment (particularly of their department) in which they are learning?
4. What learning approaches students use in higher education institutions? What are the factors for their choice of the particular approach?
5. What are the problems challenging the effectiveness of the teaching learning process?

1.3 Objectives of the study

The general objective of the study was to assess the approach adopted by teachers' and students' in the teaching-learning process and looking its implication from quality perspective. Specifically the study was aimed to:

- Identify the approach adopted by teachers and students in the teaching learning process at Mizan-Tepi University.

- Look the students view on the context of the environment (their department) in which they are learning.
- To assess teachers effectiveness in bringing good practice of teaching in the university.
- Explore problems hindering the teaching learning process.
- Infer the implication of the process to the quality of education.

1.4 Significance of the study

Investigating the practice of teaching and learning process (with regard to its approach) helps different stakeholders of education in the following way.

- It shows the University community about the dominant approaches adopted by teachers and students in the teaching learning process.
- It also shows the university community about the prevailing problems hindering the teaching learning process.
- It recommends the staff and students to take corrective measures for effective teaching learning process.
- It helps other researchers in the area as a spring board.

1.5 Delimitation of the study

Even though the concern of this study is a critical issue in all higher education institutions, it only focuses on Mizan-Tepi University instructors and students. The study duly emphasize on the approach and problems of the teaching learning process. Freshman students and teachers who do not have students in their department are excluded from the study.

1.6. Limitation of the Study

The researcher has tried to include participants who have characteristics of the variables treated in the study from the three faculty with appropriate sampling techniques. But in all cases, the study entirely based on self report measures, by which teachers and students expressed their activities through questionnaire and interviews. Therefore, the researcher has no chance to check participants' response regarding the extent to which they practice the particular approach in the classroom setting through direct observation.

1.7 Definition of basic terms

Approach: Is the strategy or way that the students and teachers use in the teaching learning processes..

High quality teaching approach: it is an approach to teaching which focuses on higher level students learning like understanding, analytical, creativity.

Surface Approach: An approach to learning that comes from the intension to get the task out of the way with minimum trouble while appearing to meet course requirements (Biggs, 2003.).

Deep approach: An approach which comes from a felt need to engage the task appropriately and meaningfully, so that the students tries to use the most appropriate cognitive activities for handling it (Biggs,2003).

High quality learning approach: this is an approach to learning which demands higher level learning through understanding of contents than simple memorization.

Information transmission/teacher focused: a teacher centered approach with the intention and strategy of transmitting information for students.

Conceptual change/ student focused: a student centered approach with the intention and strategy of helping students to develop their understanding about their world through active engagement.

1.8 Organization of the study

The study was organized under six main chapters. The first chapter dealt with the background of the problem. Chapter two and three deals with the review of related literature and the research methodology respectively. The presentation and analysis of data would be discussed in chapter four while discussion was made in chapter five. The last chapter is about summary, conclusion and recommendation of the study.

CHAPTER 2: REVIEW OF RELATED LITERATURE

2.1. Purposes of Higher Education

Higher education institutions are very important places where graduates of all kind can be obtained/produced. Education all over the world is still looked up on as a harbinger of all other changes; social, cultural, economic, scientific and technical (Rao, 2003). According to Ramdsen (2003, p.29), “in knowledge based economies, governments see universities as engines for social change and the expansion of prosperity”. Similarly, Rao (2003) suggested, as institutions of Higher Education have the main responsibility for equipping individuals with the advanced knowledge and skills required for positions of responsibility in government, business and the profession. One of the basic changes that are envisaged is that knowledge will not only be source of authority, but also the capital for further development. Therefore, the role higher education institutions play in the development of the country is unquestionable. Currently, Ethiopia is also in need of expanding these institutions to fill the gap that exists in the process of economic development.

2.2. The Concept of Quality Education

The importance of education as instrument of change and progress has been underlined by various educational experts, committees and commissions (Rao, 2003). Education plays its role for social and economic development, if it is provided with quality. OECD (2009) indicated that in the context of the sustained growth and diversification of Higher education systems, society’s concern about the quality of the program offered to students are increasing. Quality education lacks of clear

definitions. The concept is very broad that can be seen from different angles like the management, research, infrastructure, learning resources, curriculum relevance, the teaching learning process and the like. This makes the term quality not to be defined in specific way rather the effective accomplishment of each component will lead to the assurance of quality education. From these, the way teaching and learning is taking place contributes its part for the achievement of quality education.

According to Joshi (1978), “good teaching is the main spring of our economic and social progress-the highest expression of achievement in our society, ennobling and enriching human life” (p. 28). With the rapid expansion in Higher education in the past decade coupled with a rising emphasis on accountability, teaching and learning quality has moved to the centre stage worldwide (Ho, Watkins & Kelly, 2001). This is what Ethiopians are now thinking about, with respect to the expansion of HEI and the quality of their products.

2.3. Teaching-Learning in Higher Education

Having the concept of quality education from broad perspective, we can look the teaching learning process as one strand of the issue. Therefore, to contribute for the assurance of quality education, the quality of the teaching learning process must be ensured. According to Devlin (2007,) increasing attention is being given to the quality of teaching and learning at University level across the world to ensure the quality of education. There is an increasing demand both to secure effective teaching in universities and to be able to demonstrate that effectiveness. This increasing emphasis on quality of teaching and learning has placed new demands on methodologies which are promising for the participation of students in the teaching learning processes.

Ashcroft (2004) in her article of the massification of higher education, recommended the Ethiopian teachers to make a change to the philosophy of teaching to permit more student centered learning relying much less on direct instructor input .

2.3.1. Theories of teaching in higher education

Thinking about teaching as a process of changing students understanding in a general way is not sufficient to ensure that good teaching actually happens. Teaching always takes place within particular context for instance Physics, Writing, Economics, and Engineering departments. Ramdsen (2003) by putting results from different research on students approach to learning together; he described three generic ways of teaching in higher education, each of which has corresponding implications for how students are expected to learn. These include:

Teaching as telling or transmission: Many University teachers implicitly or explicitly define the task of teaching undergraduates as the transmission of authoritative content or the demonstration of procedures. The lecturers' role is seen as communicating knowledge smoothly, it is both necessary and sufficient that he or she should be an expert in the subject matter. The theory shows some affinities with the superficial engagement with content that typifies surface approach. This theory implies that all problems in teaching and learning reside outside the lecturer, the program of study, or even the university. Fentsfermacher and Soltis (2004) regarded this kind of teaching as an “executive approach” to teaching by which teachers are viewed as a manager of complex classroom process, a person charged with bringing about certain outcomes with students through using the best skills and techniques

available. Carefully developed curriculum materials and methods of teaching backed by research are very important to this approach.

Teaching as organizing student activities: In this case, the focus moves from the teacher towards the student. Lecturers see teaching as a supervision process involving the articulation of techniques designed to ensure that students learn. Teaching is seen no longer as being mainly about telling or transmission; it is also about dealing with students and above all about making them busy, using a set of efficient procedures to cover the ground. Learning teaching techniques is, in this theory, a sufficient basis for improving teaching. If we learn how to do something, it is assumed that learning how to reflect on what we do and apply our knowledge to new situations naturally follows. Fentsfermacher and Soltis (2004) call this as a “facilitator approach” by which it places a high value on what students bring to the classroom setting. Teachers in this approach are typically an empathetic person who believes in helping individuals grow personally and reach a high level of self actualization and self understanding.

Teaching as making learning possible: In this conception of teaching, students and the subject content to be learned are linked together by an overarching frameworks or system. Teaching is comprehended as a process of working cooperatively with learners to help them change their understanding. Teaching involves finding out about students misunderstanding, intervening to change them and creating a context of learning that encourages students to engage with the subject matter. Fentsfermacher and Soltis (2004) consider this as a “liberationist approach” by which teachers are viewed as a one who frees and opens the mind of the learner,

initiating him or her in to human ways of knowing and assisting the learner in becoming a well rounded, knowledgeable and moral human beings .

When we move from the former to the latter theories, the role of the teacher is becoming to focus on increasing students learning than imparting facts and principles. Similarly, the autonomy of students in their learning increases when we move from the former to the latter.

2.3.2. Approach to Teaching

Having the above three theories of teaching, scholars has developed different approaches to teaching. Approach to teaching was described from studies using the same research perspective conducted with University teachers and two qualitatively different approaches to teaching were described on the continuum.

Scholars like Cliff, 1998; Murray & Mcdonald, 1997; Trigwell, Prosser & Ginns, 1996, 2005) catagorized teaching approach in to five ranging from a conceptual change/student focused (CC/SF) approach to an information transmission/teacher focused (IT/TF) approach. They described each category as follows.

Approach A. A teacher focused strategy with the intension of transmitting information to students

This approach is one in which the teacher adopts a teacher focused strategy, with the intention of transmitting to the students information about the discipline. In this transmission, the focus is on facts and skills, but not on the relationships between them.

Approach B. A Teacher focused strategy, with the intention of helping their students to acquire the concepts of the discipline

This approach is one in which the teacher adopts a teacher focused strategy with intension of helping their students acquire the concepts of the discipline and the relationships between them. These teachers assume that their students can gain these concepts by telling their students about the concepts and their relationships.

Approach C. A teacher student interaction strategy with the intention that students acquire the concepts of the discipline

This approach is one in which the teacher adopts a student teachers interaction strategy to help their students acquire the concepts of the discipline based concepts and relationships between them. Like approaches A and B they are not seen to construct their own knowledge, but unlike approaches A and B they are seen to gain this disciplinary knowledge through actively engaging in the teaching -learning process.

Approach D. A student focused strategy aimed at students developing their conceptions

This approach is one in which the teachers adopt, a student focused strategy to help students further develop the world view or conception they already adopt. A student focused strategy is assumed to be necessary because it is the students who have to construct their knowledge in order to further develop their conceptions.

Approach E. A student-focused strategy aimed at students changing their conceptions

This approach is one in which teachers adopt a student focused strategy to help their students change their world views or conceptions of the phenomena they are studying. Like approach D, Students are seen to have to construct their own

knowledge, and so the teacher has to focus on what the students are doing in the teaching learning situation. A student focused strategy is assumed to be necessary because it is the students who have to re-construct their knowledge to produce a new world view or conceptions. The teacher understands that he/she cannot transmit a new world view or conception to the students.

Fentsfermacher and Soltis (2004) of the three approaches to teaching (i.e. the executive approach, the facilitator approach and the Liberationist Approach) have similar ideas with IT/TF and CC/SF discussed above and which are also inline with the three theories of teaching in higher education by Ramdsen.

R * Even though these scholars classified teaching approach in to different classifications, their concept lies on two different points i.e. teacher centered and students centered approach. Trigwell and Prosser developers of the questionnaire (ATI), found information transmission intention and teacher focused strategy subscales loaded as one factor, where as conceptual change intention, student teacher interaction strategy and student focused strategy subscales loaded together as one variable. Therefore, we can conclude that, there are two approaches of teaching.

Broadly speaking, a teacher/content centered conception of teaching is one where the teachers' job is conceived of as knowing his/her subject and then accurately and clearly imparting that knowledge to her students. With this conception Watkins et al. (1991) said that it is the students fault if the learning outcomes are unsatisfactory and especially students' lack of motivation or ability is to blame. On the other hand, Watkins et al. (1991) argues that a student/learning centered conception of teaching is one where high quality learning is viewed as requiring active construction of meaning

and the possibility of conceptual change on the part of the learners. From this student /learner centered conception, it is the teachers role to facilitate and encourage each construction and development.

The point here should be which one is more desirable in higher education. Devlin (2006) indicated that University teachers thinking must move away from a teacher/content centered conception toward a student/learning centered conception in order that they would be able to improve teaching practices and student learning outcomes. Kember in Devlin (2006) noted that the conception of teaching approach towards the student centered end of the continuum are superior. Thompson et al. in Yalaw (2004) underlined the importance of learner centered approach as;

The process of discovering what students are thinking, providing opportunities for them to examine and correct possible misconceptions, and providing situations that invite students to expand their thinking and building new knowledge is enhanced by active participation in guided and authentic collaborative exercises ...in addition to enhancing student learning, these approach's have also been shown to increase retention (p.22).

2 These point ensure, as student centered approach is more appropriate for students learning especially in higher education institutions.

The philosophy teachers hold about teaching and students learning influences their actual practice of teaching. This implies, if teachers view theory 1 (teaching as transmitting information) as appropriate, they tend to focus on teacher centered ways of teaching. The reverse is true for those teachers who perceive teaching with the

philosophical assumption of facilitating students learning, rely on students centered form of teaching. Teachers conception of teaching and learning, contribute its part in the actual process of teaching and learning. Therefore, to enable teachers to practice the learning focused/student centered approach; first their philosophical conception of teaching and related concepts should be changed. Literature also indicates a common assumption that some form of change in teaching beliefs, attitudes and /or perceptions must first be initiated –it has been further assumed that this change will lead to changes in teaching practices which will in turn lead to improved student learning. This implies that, to know the approach adopted by teachers sufficiently, it is better to start from their conception and look their actual practice.

2.3.3. Effective Teaching

Contemporary educators focus on the active participation of students in the process as a means for effective teaching. According to Devlin (2007) effective teaching has been broadly understood as teaching that is oriented to and focused on students and their learning. “Teaching quality is what teachers do with what they know once they get inside the classroom...it includes the strategies and techniques teacher uses to get students to learn” (Leslie et al., 2002, p.36). Perrot (1982) in her book has indicated different studies done by many scholars on observable indicators of effective teaching. She summarized the findings of Flanders (1970) as follows;

His study on styles of teaching came up with “direct and indirect” styles of teaching. Substantial number of studies has found that.... pupils of “indirect” teachers learn more and have better attitudes toward learning than pupils of direct teacher. Indirect teaching is

characterized by teacher reliance on asking questions, accepting pupils' feelings, acknowledging pupils' ideas and giving praise and encouragement.

Similarly, Shuel in Draffan and Rainger (2007) indicated that if students are to learn desired outcomes in a reasonably effective manner, then, the teacher's fundamental task is to get students to engage in learning activities that are likely to result in their achieving those outcomes.

This shows that, teachers should follow or adopt techniques of teaching which encourage/permit students to engage actively in the process. As Peterson and Walberg cited in Firdissa (2005) 'effectiveness in learning depends up on a teachers' ability to select and use the appropriate teaching strategy at the appropriate time and considering learners experiences and preferences' (p.51). Learning in educational institutions should be about changing the ways in which learners understand, experience, or conceptualize the world around them (Ramdsen, 2003). In extending his idea Ramdsen suggested the aim of teaching as attempting to alter students understanding, so that they begin to conceptualize phenomena and ideas in the way scientists, mathematicians, historians, physicians or other experts conceptualize them, in the way that is to say, that we as academicians want them to understand.

Therefore what criteria does effective teaching constitute? Researches have found what characteristics good teaching and learning constitutes. Chickering and Gamson (1987) summarized the criteria of good teaching in higher education as follows.

Good practice of teaching should:

A. Encourages student- instructor contact: frequent student instructor contact in and out of the classes is an important factor in student motivation and involvement. Instructor concern helps students to get through rough times and keep on working. Knowing a few instructors well enhances students' intellectual commitment and encourages them to think about their own values and future plans.

B. Encourages cooperation among students: Learning is enhanced when it is more like a team effort than a solo race. Good learning, like good work, is collaborative and social, not competitive and isolated. Working with others often increases involvement in learning. Sharing ones own ideas and responding to others reactions improves thinking and deepens understanding.

C. Encourages active learning: Students do not learn much just sitting in classes listening to instructors, memorizing assignments and spitting out answers. They must talk about what they are learning, write about it, relate it to past experiences, and apply it to their daily lives. They must make what they learn part of themselves. Goldenberg in Yalew (2004) posited that “when learning gives students the chance to actively engage in the process and when teachers allow them to see the relation between what they know and experienced, it encourages the development of creativity, inquisitiveness and motivated learning” (p.19).

D. Gives prompt feedback: Students need appropriate feedback on performance to benefit from courses. In getting started, students need help in assessing existing knowledge and competence. In classes, students need frequent opportunities to perform and receive suggestion for improvement. At various points during college,

and at the end, students need chances to reflect on what they have learned, what they still need to know, and how to assess themselves.

E. Emphasis time on task: learning to use one's time well is critical for students and professionals alike. Students need help in learning effective time management. Allocating realistic amounts of time means effective learning for students and effective teaching for instructors.

F. Communicates high expectations: High expectations are important for every one-for the poorly prepared, for those unwilling to exert themselves, and for the bright and well motivated. Expecting students to perform well becomes a self fulfilling prophecy when instructors hold high expectations for themselves and make extra efforts.

G. Respects diverse talents and ways of learning: People bring different talents and styles of learning to universities. Students need the opportunity to show their talents and learn in ways that work for them. According to MoE as cited in Firdissa (2005) stated 'Since the same method does not work for every student, HEI teachers should be able to use a variety of teaching methods, so as to address the individual needs and preferences of the students they teach' (p.50).

H. Linking assessment with teaching and learning: This is another important point which the researcher believes in contemporary higher education as one criterion for effective teaching. Falchikov (2005) said, "for learning to be integrative and lasting, the educational system must be coherent, connecting teaching, learning and assessment" (p.55). According to Stiggins (2004) stated "...if it is used with skill, assessment can motivate the unmotivated, restore the desire to learn and encourage students to keep learning and it can actually create- not simply measure increased

achievement” (p.40). This shows that assessment is an ingredient to link or reinforce teaching with students learning.

The paradigmatic shift from teaching to learning in contemporary higher education, took the role of assessment for improving the teaching learning process rather than mere measuring of students achievement and grading. Currently ‘assessment for learning’ is becoming more popular than ‘assessment of learning’ in theoretical aspect. Therefore, assessment plays a paramount role in improving teachers’ way of teaching which can in turn influences students learning approach. The more you can bring teaching, learning and assessment together, the more successful you and your students will become in knowing how and to what extent meaningful progress is being made (Ellis, 2001).

The relationship between conception of teaching and the actual practice

Teachers conception of teaching is related with his/her actual practice of teaching and student learning approach. According to Trigwell and Prosser in Devlin (2006) has demonstrated that teachers conception of teaching affect their teaching practices and their students learning. Similarly Ho et al. (2001) claim that a lecturer who conceives of teaching, as the transmission of information is likely to employ teacher centered strategies in order to operationalize that conception. On the other hand a lecturer who conceives of teaching as helping students to develop their own understanding of material is likely to employ student centered strategies so that she/he can assist her/his student to come to this understanding.

Therefore, teachers' philosophy/conception of teaching highly related with their practice which in turn influences students learning approach. To have a good

practice of teaching and result better students learning, teacher's must have good conception of teaching which can results maximum students learning. In supporting this idea, Ho et al (2001) said, there has been a recognition on that genuine improvement in teachers has to begin with a change in their thinking about teaching and learning. Similarly, Gow and Kember in Ho et al (2001) presented evidence that within a department a predominant transmission conception appears to discourage students from adopting a deep approach to learning, while a belief in teaching as the facilitation of learning is less likely to induce surface approach. The approach adopted by students can be influenced by different factors of which one is the approach adopted by teachers in their teaching. According to Case and Marshal (2004), students will easily change their approaches to learning in response to changes in the teaching environment.

2.3.4. Theories of learning

Learning is a process of discovery that generates new understanding about ourselves and the world around us (Ranson, et al.,1996). Other psychologists and educators define learning in the way that they perceived the world around them. These different definitions for learning and the process of learning led scholars to develop learning theory. According to Bigge and Shermis (2004):

A learning theory is a systematic integrated outlook in regard to the nature of the process whereby people relate to their environments in such a way as to enhance their ability to use both themselves and their environments in a most effective way (p.8).

With these respect different learning theories have been developed starting from early period. Even though many theories are evolving from time to time, in one way or another they are categorized under one of the following major learning theories (i.e. Behavioral, Cognitive Constructivist, Humanistic and Social learning theory). These major theories are the amalgamation of other many theories, which have relatively similar stance about learning and the occurrence of learning.

For behavioral learning theory, learning is a change in observable behavior, which occurs through stimuli and responses becoming related according to mechanistic principles (Bigge & Shermis, 2004). Behavioral learning theory interprets learning in terms of changes in strength of stimulus-response connection, associations, habits, or behavioral tendencies. With this theory teachers desire is to change the observable behaviors of a students in a significant way.

In Cognitive learning theory, learning is perceived as a process of gaining or changing insights, outlooks, expectations or thought patterns. They define learning in terms of re-organization of perceptual or cognitive fields so as to gain understandings. Here the assumption is that, humans are logical beings who make the choices that make the most sense to them. Pure cognitive theory largely rejects behaviorism on the basis that, behaviorism reduces complex human behavior to simple cause and effect. In this theory the teacher aspires to help students develop their understanding of significant problems and situations.

The Constructivist learning theory explains human learning as an active attempt to construct meanings in the world around us. Constructivists believe that learning is more active and self directed than either behaviorism or cognitive theory

would postulate. The constructivist stance maintains that learning is a process of constructing meaning; it is how people make sense of their experience (Merriam & Caffarella, 1999). Followers of this theory believe learner centric instructional classroom methods will strengthen the commitment and involvement of self motivated learners because of their high level of interaction.

Having these philosophical outlooks or learning theory, students learning can be influenced by their environments in our case, especially of classroom environment. As Yalaw (2004) stated:

The views, philosophies, values and conceptions teachers have about the manner in which teaching-learning process should take place determine the nature of instructional methods they chose to present the lessons to their students, the ways they discipline the class, and the type and quality of interactions they make with their students (p. 18).

We cannot conclude that all teachers will rely on one theory in their lessons rather they can be flexible in a different situation. What is important here is that, teachers should create an environment which results a maximum learning on the side of students. Based on the available context of the learning environment, students will adopt an approach which enables them to interact and grasp/survive the existing situation.

2.3.5. Learning in higher education

‘Learning is about how we perceive and understand the world, about making meaning’ (Marton in Fry et al., 2003, p.9). Fry and his colleagues (2003) elaborated this idea as learning might involve mastering abstract principles, understanding proofs,

remembering factual information, acquiring methods, techniques and approaches, recognition, reasoning, debating ideas, or developing behavior appropriate to specific situations. Of course all these points mentioned by Fry characterize all educational institutions including higher education. Currently, the notion of learning as understanding the concept of course content is becoming an issue than learning as quantitative increase in knowledge. As Biggs (1996) posited:

There is a need for education today to move away from an emphasis up on teaching towards a perspective which emphasizes learning. This orientation, often referred to as 'learner centeredness' provides a conceptual framework for describing how a learner defines his or her world of learning and comes to terms with it by engaging in the process of learning he or she finds relevant to personal goals and interests.

Barr and Tagg (1995) are the most figured scholars in this area. In their discussion of paradigmatic shift from instruction to learning, they elaborated the difference between the two paradigms with different aspect. In instructional paradigm the chief agent in the process is the teacher who delivers knowledge; students are viewed as passive vessels, ingesting knowledge for recall on tests. "Learning is presumed to be cumulative because it amounts to ingesting more and more chunks" (Tagg & Barr, 1995). On the other hand, the learning paradigm frames learning holistically, recognizing that the chief agent in the process is the learner. Thus, students must be active discoverers and constructors of their own knowledge. In this paradigm, knowledge consists of frameworks or wholes that are created or constructed

by the learner. According to Barr and Tagg (1995) in learning paradigm knowledge is not seen as cumulative and linear, like a wall of bricks, but as a nesting and interacting of frameworks... learning is revealed when those frameworks are used to understand and act. This shift of paradigms now a day in HE from teaching to learning is getting acceptance from many scholars including Ethiopians. Teachers knowingly or unknowingly conceive and/or preach as learner centered approach is more preferable than teacher centered approach, however; their practice may not be inline with their conception/belief.

Research findings prevails that, a student learning which emphasis more on concept acquisition or understanding, enables them to apply their knowledge in different context. The learning paradigm of Barr and Tagg (1995) promotes learning in higher education to be conceptual change on the part of students. They stated this as follows;

“Education for understanding” –a sufficient grasp of concepts, principle and skills so that one can bring them to bear on new problems and situations, deciding in which ways one present competencies can suffice and in which way one may require new skills or knowledge”

According to Ramdsen (2003) learning that involves a change in understanding implies and includes a facility with a subjects techniques and an ability to remember its details. Studies in Uk higher education shows that the emphasis on student-centered teaching, promoting interaction and developing criticality all contributes towards improving the student experience and towards maximizing learning potential.

David in Hartley et al. (2005) viewed effective learning as it is essentially a holistic process that integrates knowing and doing in a critically reflective way and moreover, that Work Based Learning (WBL) is a sound facilitator of this quality. Therefore, all this findings portray for effective learning to takes place, the learner must participate actively and teachers must use techniques which provide an opportunity for students to participate. Learning in higher education should emphasis more on 'higher level' conceptions such as learning as applying, abstracting meaning or understanding reality, rather than emphasizing on quantitative increase in knowledge (Kember, 1996. Firdissa (2005) also posited that "what ever the case, learning takes place more readily and effectively, when a number of the human faculties are brought in to the action" (p.51).

2.3.5.1. Conceptual model for teaching and learning in higher education

Much of the research conducted on student learning in higher education has been summarized in terms of the 3-P models of Biggs (2003), containing three elements: presage, process and product. The overall assumption that Biggs has about learning through this 3-P model is that learning outcomes are a result of the interactions of the teaching and learning contexts with the student approaches to learning. Both student and teaching presage factors interact to produce an approach to learning, which produces its characteristic outcome.

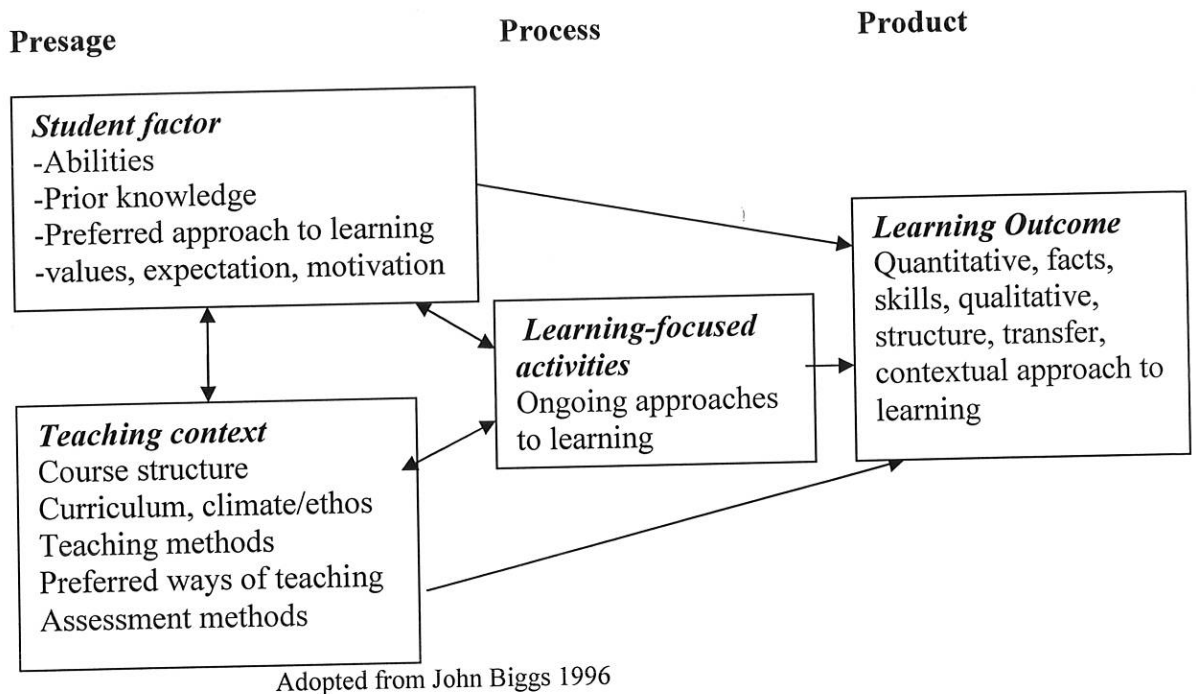


Fig 1. The 3-P models of teaching and learning

Students bring into the learning system some predispositions that are learning-related, such as prior knowledge, abilities, values and expectations, ways of learning. These learning-related characteristics are referred to as the student presage factors that have a direct impact on the ways students choose to process academic tasks. The teaching context is the environment set by the teacher and the institution, through the course structure, curriculum content, methods of teaching and assessment. Students perceive and interpret the teaching context and adopt a study approach that they think will help them to meet the demands of the teachers, and the courses. Hence, an approach to learning is not simply a fixed attribute of the learner, but a function of both learner characteristics and the teaching factors. Case and Marhshal (2004) also indicated as the discipline and level of material to be learnt have an influence on students' learning. Students' characteristics and the learning environment (presage

factor) jointly determine the students' perception of learning environment. Then the perception they have about their learning environment, will produce a particular approach to learning which is broadly conceptualized as either 'deep' or 'surface' (Entwistle, 1991 and Ramsden, 1992, 2003). The model represents relationships between the students' characteristics, perceptions of the learning environment, approaches to learning and learning outcome. Here, what we have to note is that, the approach adopted by teachers in their teaching and students in their studying should focus to bring maximum learning on the part of students.

The model also seems to work for teaching approach as well. Teachers have different background characteristics like conception of teaching, experience, workload, training, and the like. In addition the context in which they are teaching like students background influences the approach they adopt in the process. Teachers perceive teaching approach that they think will help them to deliver the course content to their students. Teachers' characteristics and teaching environment (students' background) determines teachers' perception of teaching and its approach. Then the perception they have about teaching will produce a particular approach to teaching which is broadly perceived as either teacher centered or student centered (Trigwell, Prosser, & Tylor 1994). These are described clearly in the approach to teaching section of this chapter.

The process phase refers to the way teachers and students experience and deal with teaching and learning situations. The heart of the teaching/learning system is at the process level, where the learning related activity produces or does not produce the desired outcomes (Biggs et al., 2001).

The 'Product' phase of the 3-P model suggests that study approaches are related to qualitative differences in learning outcomes. Students with deep approach will produce high quality learning outcomes, while in the surface approach they will result in lower quality outcomes. The 3P's (Presage, Process and Product) when combined explain what learning is about (Biggs, et al, 2001). It involves the interaction of the student and teaching contexts to produce a particular approach to learning, either deep or surface, which affects the quality of learning outcomes.

The central message of the model for teachers particularly in higher education is that if we are to encourage the development of quality learning outcomes in our students, such as deep learning, understanding, independent learning, critical and creative thinking, problem solving and other lifelong learning attributes, we may need to create contexts that discourage surface, and encourage deep approaches to learning. These calls directly to the approach teachers adopt during their teaching. To bring quality learning in students, teachers should bring students at the center of the process. Therefore, student centered approach of teaching and deep approach of learning are the two desirable approaches in higher education due to their promotion of high quality learning.

2.3.6. Approaches to learning

Having the above two factors (background and context), students adopt an approach which enables them to meet the demands of the course and teachers. Education deals with students as people, who are diverse in all respects, and ever changing. According Fry et al. (2003) "Students bring different backgrounds and expectations to learning and not everyone learns in the same way, or equally readily

about all types of material” (p.9). “Approach to learning is a direct description of learning process used by students and it can be influenced by different factors” (Kember, 1996, p.341). Ramdsen (1992) also discussed that students’ thoughts and actions are profoundly affected by the educational context or environment in which they learn. This author in his book indicated as there are two different kinds of learners who address their learning differently. As he said:

In most cases, students react to the demands of teaching and assessment in ways that are difficult to predict a lot of their learning. It is not directly about chemistry or history or economics and others, but about how to please lecturers and gain high marks. Other students can focus on understanding the concepts of the course content which is preferable in higher education. In each case, the role of teachers in influencing students’ choice of the particular approach is great.

According to Schmeck in Buckley, et al.(2010) approaches to learning are exhibited when students adopt their learning to suit either their preferences or the situation in which they are engaged. Biggs, et al (2001), Entwistle, (1991) and Ramdsen, (1992) identified two main levels of processing which were clearly related to the qualitative differences in the levels of understanding achieved (a high or low level of understanding). They called these levels of processing as Deep and Surface. Others also found additional approach in between these two approaches i.e. strategic approach.

2.3.6.1. Deep Approach

This approach comes from a felt need to engage the task appropriately and meaningfully, so that students try to use the most appropriate cognitive activities for handling it (Biggs, 2003). Students adopting this approach set out the intention of understanding the materials, they interact critically with the arguments put forward, relate them to their own prior knowledge and experience, and evaluate the extent to which conclusions are justified. It is based on perceived need, such as intrinsic interest, to engage with the task appropriately and meaningfully. Having the intention to understand the material to be learnt students with this approach use strategies such as reading widely, combining a variety of resources, discussion, reflection, relating parts to a whole, and applying knowledge in real world situations. Students who learn in this way are capable of applying knowledge in new situations and in this way they are better prepared for professional life. Ramsden, (1992) summarized the characteristics of deep approach as learning that seeks to understand and connect the concepts, relate ideas to previous knowledge and experience, explore links between evidence, analyze arguments and examines rationally.

2.3.6.2. Surface Approach

This approach comes from the intention to get the task out of the way with minimum trouble while appearing to meet course requirements (Biggs, 2003). A surface approach is associated with students who orient their learning towards memorization and reproduction. They rote learn in unrelated ways and are constrained by the specific learning task. It is based on a motive or intention that is extrinsic to the real purpose of the task. Although this approach is taken as successful by some

students in certain learning situations, the drawback is that after a test that acquired knowledge is quickly forgotten application of the knowledge for existing structures is hardly developed and students are not skilled in applying knowledge to new situations. Students with this approach realize their intention to reproduce the material to be learnt and avoid failure through regurgitating information and using rote learning techniques.

Ramdsen (1992) identified a third approach which is called a 'Strategic' approach. This describes students who are primarily concerned with achieving the highest possible grades. They are both deep and surface approaches as appropriate and have a competitive and vocational motivation. More recently, these ideas have been developed in to larger frameworks that attempt to provide overarching and systematic models of teaching and learning in higher education (Trigwell & Prosser in Buckley et al., 2010). This often includes rote learning, filling an essay with detail rather than discussion and list points rather than providing background or context to the work. Some scholars and researchers put the strategic approach as a balance between the two approaches. John Biggs categorize the strategic approach as part of deep approach in encouraging higher level of learning.

2.4.7. Measuring approaches to teaching and learning

Measuring approaches to teaching and good practice.

The approach to teaching inventory (ATI) by Trigwell, Prosser & Ginns, (2005) was originated from phenomenographic pedagogy and passed through many revisions. It is now being widely used as an instrument for formally monitoring approaches to teaching. The questionnaire has two main scales (information

transmission teacher focused (IT/TF) and conceptual change student focused (CC/SF) approaches with two subscales (intention and strategy) for each.

Measuring students' perception of learning environment and approaches to learning

The Course Experience questionnaire (CEQ) by Ramsden, (1991) was originally proposed to measure the effectiveness of staffs and courses of departments as perceived by students of that department. But latterly, after many revisions it was also accepted as an instrument used to measure the context of the department in which students are learning. To measure the approach adopted by students in their learning, the original research by Marton and Saljo (1976) which characterized by Deep and Surface approaches which is done through qualitative research methods is serve as a spring board to develop questionnaire. Since then, the study process questionnaire (SPQ) for higher education by Biggs, (), Approach to studying inventory (ASI) have been developed by Ramsden & Entwistle and passed through different modifications. For this study the revised study process questionnaire of the two factor (R-SPQ-2F) questionnaire of Biggs, et al. (2001) was used.

CHAPTER 3: METHODS

The nature of the problem needs to be viewed from universal principles and the specific context under which it is operated. Therefore, employing mixed approach enables us to look from global perspective and the context based practices from participants' perspective. "Concurrent explanatory" (QUAN + qual) design is the specific design through which the study was conducted. This shows that the study was more of quantitative survey which was complemented by qualitative method. Therefore, this design enabled the researcher to enhance information obtained through quantitative survey by qualitative exploration.

3.1 Population and Samples of the Study

3.1.1 Population

Mizan-Tepi University instructors and students were the population of the study. The University has a total of 238 instructors of which 108 were masters and above while the rest are at bachelor level. There are a total of 2300 students in the university under six faculties. The study particularly focused on 2nd and 3rd year students of the university. Therefore, all Mizan Tepi University teachers and students of second year and above were the target population for which inference would be made from the sample. Teachers (N=143) and students (N=1221) of three faculties i.e. Social science and Humanities (N=58 teachers & 432 students), faculty of Business and Economics (N = 39 teachers & 402 students), and faculty of natural and computational science (N = 46 teachers & 386 students) were the accessed population in this study from which individual samples were drawn.

3.1.2 Sample, Sampling Technique and procedures

The study included samples from three faculties' i.e. Social Science and Humanities (n= 29 teachers & 81 students), Natural and Computational science (n=23 teachers & 75 students), and faculty of Business and Economics (n = 20 teachers & 76 students). These faculties were selected purposively because they are operating for more than three years while the rest are at the infant stage of having only first year students.

After the faculties were determined, the researcher employed simple random sampling (lottery system) to represent departments for each faculty and stratified random sampling for individual cases for each department. With this procedure, Sociology (n = 6 teachers & 22 students), Psychology (n = 8 teachers & 19 students), English (n= 9 teachers & 20 students) and Geography (n = 6 teachers & 20 students) from faculty of social science and humanity, where as Management (n= 9 teachers & 23 students), Economics (n= 7 teachers & 27 students) and Accounting (n = 7 teachers & 24 students) from faculty of Business and Economics were selected. Faculty of natural and computational science was represented by departments of Biology (n = 8 teachers & 25 students), Mathematics (n = 7 teachers & 25 students) and Chemistry (n = 5 teachers & 25 students). Finally, a total of 72 teachers and 230 from the three faculties were selected. The researcher believes that, the indicated amounts of departments and individuals are sufficient to provide information about the practice of teaching-learning process on the survey questionnaire.

For the qualitative part of the study I have taken 12 students (both from high and low achiever students) and 10 teachers, whom I think they could provide information for the particular issue and conduct an interview with them. These individuals were selected purposively from the populations which were included in quantitative part of the study. The “parallel concurrent” sampling design provided by Onwuegbuzie and Collins on Johnson and Christensen (2008), were the particular design used in selecting the samples.

3.2 Data Gathering instruments and Procedures

Questionnaire and interview were the two main techniques employed to gather data from the respondents.

Questionnaire: A questionnaire consisting of four parts were used to gather data both from teachers and students. In the first part of teachers questionnaire, some background information regarding faculty, gender, educational level, teaching experience, workload were included and it also identifies whether teachers taken pedagogy courses or not. In the second part, teachers conception of the approach adopted in their teaching were assessed by using approach to teaching inventory (ATI) of Keith Trigwell and et al. The questionnaire has two main scales i.e. Information transmission teacher focused (IT/TF) and Conceptual change student focused (CC/SF) approach each of which has two subscales (intention and strategy). Teachers teaching practice were evaluated in the third part of the questionnaire. Items for this part were developed by the researcher based on the seven principles of good practice of teaching and learning in higher education. The last part was open ended items which allow teachers to reflect their opinion on different issues raised in the item.

Similarly, a questionnaire prepared for students has four parts. The first part is about students' background information like their faculty, department, gender and GPA. Students' conception of their learning environment and their learning approach, were assessed by using the course experience questionnaire (CEQ) and the revised study process questionnaire adapted from Ramsden (1991) and Biggs et al. (2001) respectively. These were dealt in part two and three. The last part focused on exploring students' opinion on some issues regarding the practice of teaching learning process.

Interview: By employing in-depth interview with 12 students and 10 teachers, the researcher tried to enhance the quantitative data and explore response for the fifth question of the study. Through this technique, participants were asked about teachers' way of teaching and students learning, the role of assessment in the teaching learning practice, looking the practice from quality angle, the possible challenges of the teaching learning process and suggestions for the improvement of the practice.

The questionnaire was employed due to the large number of sample and the short time allocated for this study. While interview was conducted to enhance the data obtained through the questionnaire. This shows the study was triangulated with respect to approach, individuals and techniques of data collection.

The procedures followed during the collection of data through the two techniques were sequential. After the participants filled the questionnaire, they were interviewed. This is due to the researchers' belief that, if participants filled the questionnaire prior to the interview, they would have good understanding about the study and the better they can reflect their feeling during the interview.

Reversed questions and newly created variables

Some of the items in the questionnaire were negatively coded and they were reversed during data entry. Item 8, 10, 11, 12, 13 and 14 on the CEQ (items for learning environment) were negatively coded and they were reversed while analyzing the data. Item 25 and 28 on the questionnaire designed for assessing teachers practice were also reversed. In addition to this, some of the items adapted from Biggs et al.(R-SPQ-2F) and Trigwell et al.(ATI) were reversed to create new variables in the study. In this regard items measuring information transmission teacher centered (IT/TF) on ATI were reversed and summed up with scores on conceptual change student focused (CC/SF) to create a new variable called desirable (high quality) teaching approach.

Developers of approach to teaching inventory viewed the approach to teaching in two bipolar points (IT/TF and CC/SF) which have five ranks within them. The approaches identified as A, B, C, D, and E (see on pages 15-17) was assumed to be found on the continuum. However, the two extremes are opposite to each other in that, IT/TF take the teacher at the center while CC/SF focuses on students as the center of the process. Since the main purpose of this study was examining the extent to which teachers are adopting the desirable (high quality) approach to teaching, the two opposite side of the continuum should be changed in to one variable which can have different degrees of quality. This was done by reversing the score of all teachers on IT/TF and adding this score to the corresponding CC/SF score. These enable the researcher, to know the extent to which teachers are adopting high quality teaching approach.

Similarly, the R-SPQ-2F of John Biggs was an instrument which was developed to measure the student learning approach on two major scales i.e. deep and surface approach. After each scales or approaches were treated separately, the researcher reversed the score of students on surface approach to create a new variable which is high quality learning approach. Like that of teachers, the reversed score on surface approach were summed up with the original score on deep approach to measure the extent to which students are adopting desirable (high quality) learning approach. Finally the analyses for these new variables were run with the other variables of the study.

Ethical consideration:- Although ethical approval was officially not required at the institute in which the study was conducted, the students were given information about the study before they filled out the questionnaire and the anonymity and confidentiality of the students' responses on the questionnaire were safeguarded. This was done to create a sense of confidence on the part of students to evaluate their department staffs freely.

Variables of the study:- On the part of the teachers; the approach to teaching (IT/TF and CC/SF) and their effectiveness in practice are the two variables treated. In addition the (desirable) high quality teaching approach which was created during the analysis would also be treated.

Similarly, perception of learning environment and approach to learning (Deep and Surface) are the variables tested for students. The desirable (high quality) learning approach is also the variable treated in this study. It was created by reversing the score

of students on surface approach and summing up with the corresponding deep approach.

Pilot study: - Before the actual study was conducted, the questionnaires were administered for teachers and students to check the reliability of the instrument. Mizan-Tepi University instructors who recently came to attend their masters and PHD program at Addis Ababa University and undergraduate regular students of Addis Ababa University were the participants of the pilot study. After this, appropriate modifications were made to make the instrument reliable. Finally, the main variables of the study resulted the following cronbach alpha i.e. IT/TF (.598), CC/SF (.660), good practice of teaching (.779), deep approach (.846), surface approach (.7840 and perception of learning environment (.804). The details of reliability summary of the pilot study were attached at the appendix F of this paper.

3.3. Methods of Data Analysis

The responses obtained from the participants of the study were analyzed both in quantitative and qualitative methods. The statistical methods employed to analyze the quantitative data presented here under.

A. Pearson Product Moment Correlation: The PPMC coefficient was employed to examine the relationships between the variables treated in the study. On teachers' questionnaire, variables like the teaching approach (IT/TF & CC/SF), components of good practice of teaching and teachers background information like experience and workload were treated with this tool to see the relationship between them. Approach to learning (Deep & Surface with their component parts), perception of learning

environment (the five components) and CGPA of students were also the variables whose relationship would be seen.

B. Multiple Regression: This was computed to examine the relative contribution of teachers' background variables had to the variance in teachers' practice of high quality teaching approach. Similarly, component variables of learning environment in predicting students' adoption of high quality learning approach were examined through this tool. In both cases, the stepwise was the particular method used in the analysis because, the researcher wanted to identify variables that significantly predict the dependant variable.

C. Independent t-test: To compare the means on dependant variable, the independent t- test was used. Group's criteria like gender, qualification and professional courses, each have two independent groups i.e. F/M, BA (BSc)/ MA (MSc), and those who have taken pedagogical courses and those who didn't respectively. The comparison of these groups mean score on dependant variable was computed with this tool. The assumption underlying the independent t-test which is equal variances of groups on the treated variable were considered during the comparison. The levenes' test of (sig. >0.05) was taken as a point where the two groups have equal variances.

D. One way Analysis of variance (ANOVA): The one way analysis of variance was used to compare the mean score of three independent groups. The categories of workloads and Experience for teachers and CGPA of students were used as groups. Like the t-test, the researcher looked the assumptions validating ANOVA before comparison was made. With this respect, in both cases (teachers and students) the

groups were mutually exclusive, their equality of variances was checked through the Levenes' test and it was justified to use ANOVA.

E. Cluster analysis: This analysis was made to form distinct groups of teachers as well as students based on key variables of the study. For the hierarchical cluster analysis, the between groups method was used to look the relations for individual students and teachers. All the variables used in the cluster analysis were standardized using Z-score before the analysis. Selection of the reported cluster solution was based on the value of the squared Euclidian distance between clusters. This is better in reducing the standard errors. Then, the clusters analysis was followed by between groups contrast of (Z score means and standard deviation) using cluster membership to form the group. This tool used to clearly describe the frequency of individuals (teachers and students) in adopting desirable (high quality) teaching and learning approach.

The significance level in all cases was set at α 0.05. Descriptive statistics like mean and standard deviations were also determined.

Data obtained through interview and open ended questions were analyzed qualitatively through themes and structural patterning.

CHAPTER 4: RESULTS

In this part, results obtained from the study and their interpretation would be presented. The results were supported by tables and described.

4.1. Background Characteristics of respondents

The questionnaires were administered for 230 students and 72 teachers. From these 218 students and 69 teachers returned the questionnaire, of which 212 and 66 papers were complete for analysis and representing an overall response rate of 92.17% and 91.67% respectively. The background information of teachers (n = 66) and students (n = 212) who returned the questionnaire, which have complete response were indicated hereunder.

Table 1. Background of teachers in the sample

Strata		n	Percent (%)
Faculty	Social Science and Humanities	27	40.9
	Business and Economics	18	27.3
	Natural and Computational Science	21	31.8
	Total	66	100.0
Gender	Male	58	87.9
	Female	8	12.1
	Total	66	100.0
Educational level	BA/BSc/BED	40	60.6
	MA/MSc	26	39.4
	Total	66	100.0
Experience in year	<2 years	32	48.5
	2-5years	27	40.9
	5-10 Years	7	10.6
	Total	66	100.0
Workload	<6 Chr/week	8	12.1
	6-12 Chr/week	41	62.1
	12-18 Chr/week	17	25.8
	Total	66	100.0
Pedagogy courses	Yes	42	63.6
	No	24	36.4
	Total	66	100.0

As indicated in Table 1, teachers background was viewed from different perspective i.e. faculty, gender, educational level, experience in the profession, workload and pedagogical courses. Looking the different characteristics of these teachers helps to know the influence of their demographic information on the dependant variables in the study. With this respect, the number of samples selected from each faculty is proportional to their population (see pages 37-38). The table also shows as the number of female teachers is much less than that of males. While the balance between those who are trained with pedagogy and those who didn't relatively good for analysis. In addition the table also shows as is teachers from different groups of educational level, experience and workload are included in the study.

The background information of students included in the sample was shown in Table 2 below.

Table 2: Demographic Characteristics of sample of students in the Study

Strata		n	(%)
Faculty	Social Science and Humanities	75	35.4
	Faculty of Business and Economics	70	33.0
	Natural and Computational Science	67	31.6
	Total	212	100.0
Gender	Male	114	53.8
	Female	98	46.2
	Total	212	100
CGPA	<2.00	12	5.7
	2.1-2.54	75	35.4
	2.55-3.00	59	27.8
	3.10-3.54	38	17.9
	3.55-4.00	28	13.2
	Total	212	100.0

Like that of teachers, students were selected from the three faculties. The table shows as students from the three faculties were included proportional to the number of

population of each faculty (see page 37-38. In addition these students were selected based on their sex and academic performance (CGPA). With this regard relatively enough number of students was included from both sex and CGPA.

The descriptive statistics for the main variables of the study were indicated in Table 3 below. As it was shown in the table, the sample size who take part in the analysis of each variable, the possible minimum and maximum points, the mean and standard deviations of each variable were presented. The details of the descriptive statistics for these variables were summarized in the table below.

Table 3. Summary of descriptive statistics for main variables in the study

Variables in the study		Min.	Max	\bar{X}	s
For teachers (n=66)	Information transmission teacher centered	10	34	23.63	7.25
	conceptual change student focused	14	50	33.00	9.31
	good practice of teaching (52-127)	52	127	91.68	18.31
	Desirable (High quality) teaching approach	32	76	51.28	14.91
For students (n=212)	Conception of learning environment	32	105	69.98	15.13
	Deep approach	8	40	26.08	8.27
	Surface approach	7	35	21.54	7.82
	Desirable (high quality) learning Approach	19	71	46.41	13.83

4.2. Analysis of data for teachers

Relationship between components of approach to teaching, practice and two variables of teachers' background information (workload and experience)

To know the relationship among the components of approach to teaching, good practice of teaching and two variables of teachers background information i.e.

workload and experience, the Pearson Correlation Coefficient was computed.

Table 4. Correlation between approaches to teaching, the components of good practice of teaching and teachers background (experience and workload)

	Variables											
	1	2	3	4	5	6	7	8	9	10	11	12
ITTF(1)	-											
CCSF(2)	-.60**	-										
STC (3)	-.40**	.68**	-									
ECOP(4)	-.33**	.67**	.76**	-								
EACT(5)	-.43**	.63**	.60**	.76**	-							
PFDB(6)	-.45**	.67**	.73**	.71**	.70**	-						
TOT(7)	-.29*	.69**	.69**	.72**	.73**	.72**	-					
CHE (8)	-.36**	.64**	.68**	.75**	.67**	.71**	.72**	-				
RDT(9)	-.34**	.57**	.68**	.68**	.61**	.66**	.67**	.69**	-			
LATL(10)	-.26*	.55**	.44**	.48**	.60**	.50**	.47**	.51**	.56**	-		
GPT (11)	-.42**	.76**	.82**	.86**	.83**	.83**	.84**	.85**	.85**	.73**	-	
WOLO (12)	.40**	-.44**	-.38**	-.34*	-.23	-.27*	-.26*	-.41**	-.37**	-.24*	-.24	-
EXPR(13)	-.39**	-.17	-.09	-.05	-.02	-.12	-.06	-.17	-.21	-.17	.01	.39**

** . P<0.01 (two tailed) The Bold one are the major variables.

*. P<0.05 (two tailed)

As indicated in Table 4, information transmission teacher focused (IT/TF) approach significantly and negatively correlated with conceptual change student focused (CC/SF) approach ($r = -0.60, p < 0.01$), good practice of teaching (GPT) ($r = -0.42, p < 0.01$) and Experience (EXPR) ($r = -0.39, p < 0.01$). Similarly, IT/TF was significantly and negatively correlated with the components of good practice of teaching (see table 4). Conversely the relationship between IT/TF and workload (WOLO) found as positive and significant ($r = 0.40, p < 0.01$). This implies that, when the workload assigned for teachers is high, the possibility of adopting information transmission teacher centered approach will increase. On the other hand the correlation between CC/SF and workload is negative and significant ($r = -0.44, p < 0.01$). When teachers have high workloads, they will face difficulties to adopt CC/SF approach. Teachers reflected their opinion as they are forced to adopt teacher centered approach in the classroom setting due to high workloads. High workloads with

additional factors like class size, number of students and the like, maximizes the possibility of adopting IT/TF than CC/SF. This was explored from teachers' reflection.

“Really I am not able to practice student centered approach due to high workloads and the number of students in the classroom...student centered approach needs the teacher to identify students learning style, their background, employ different teaching techniques and looking their progress through continuous assessment; this all things need a lot of time which I don't have”

(MA teacher who have 18 crhr/week)

The other important relationship was existed in the first column of the table, that is the correlation between teachers experience and IT/TF is significant in a negative direction ($r = -0.39$, $p < 0.01$). This shows that, when teachers become experienced in teaching, the more they will become to detach from adopting IT/TF. But to what extent they will adopt the conceptual change student focused approach is not indicated in the correlation indices or there is no significant relationship between experience and adopting CC/SF.

Here, there is also a great caution for the stakeholders of education in that, those teachers who adopt IT/TF approach are far from achieving good practice of teaching. This is to mean that, the relationship between IT/TF and component variables of good practice of teaching was negative which means they are inversely related. The more the teacher relied on IT/TF, the less He/She score on components of good practice of teaching.

Another significant relationship was also found between CC/SF and components of good practice of teaching in a positive direction. CC/SF and the aggregate good practice of teaching are significantly related in a positive direction ($r =$

0.76, $p < 0.01$). Theoretically this is the right direction of relationship. When teachers adopt the CC/SF approach, the more likely they will bring good practice of teaching. The developer of good practice of teaching and learning in higher education emphasize more on the high quality of teaching approach; an approach which encourages students to learn understanding rather than to passively receive what the teacher imparts to them. Therefore, conceptual change student focused approach is a key for achieving good practice of teaching. This was clearly shown in the Table 4. The relationship between the CC/SF approach and the components of good practice of teaching was highly significant and positive. This is the anticipated relationship along with the theory of teaching as facilitating students learning. A teacher who perceive teaching as the conceptual change of students, they will present their course, along with the seven principles of good practice shown in correlation indices of Table 4. In an interview made with psychology teacher who perceive teaching as opening doors for students to learn; traced some of these principles as a means through which he creates a conducive environment for students to learn better.

Multiple Regression analysis of teachers background variables predicting the adoption of high quality teaching approach (HQTA)

The independent and composite contribution or predicative capacity of teachers' background characteristics on the adoption of high quality of teaching approach (HQTA) was computed. A multiple regression was run to examine such predicative capacity of background variables on HQTA. Variables like experience, workload, gender, faculty, educational level and professional courses were assumed to predict the adoption of HQTA and entered to the analysis. From these variables,

workload and professional courses are the only predictors for the adoption of HQTA through stepwise method. In the first step of regression analysis only two variables were significant with the setted alpha. Then, these two variables were entered in to the analysis to look if there is a change in their contribution. But the analysis prevailed the same result to that of the first step analysis. The results are indicated in the table below.

Table 5. Multiple regression analysis of the variables predicting High quality of teaching

Predictors	B	β	SE	t
Work load	-11.23	-.45	2.48	-4.53**
Professional course	11.63	.378	3.09	3.76**
R= .603 R ² = .364 Corrected R ² = .344 p<0.001				

The only factors that significantly contributed to the variance in adoption of HQTA were workload ($\beta = -.456$, $t = -4.534$, $p < 0.001$) and professional courses ($\beta = 0.378$, $t = 3.763$, $p < 0.001$). These variables in the model jointly explained 36.4% of the variance on the adoption of HQTA ($R^2 = 0.364$, corrected $R^2 = 0.344$).

As presented in Table 1, 62% and 26 % of the participants in the study have workloads of 6-12 crhr/week and 12-18 crhr/week respectively. In addition this table also shows as 64% of teachers in the sample have taken pedagogical courses while the remaining 36% do not. Those teachers who have high workloads especially those in the range between 12-18 crhr/week, has less probability of adopting high quality of teaching approach. Professional courses in the model predict the adoption of HQTA in a positive way. Those teachers, who have taken professional courses, will implement teaching in its high quality than those who didn't. This implies that, it is more likely

that teachers who had less workloads and taken professional courses tend to practice high quality teaching approach than those who have more workloads and do not taken pedagogy courses. Scholars agree on the importance of professional/pedagogical courses for the would be teachers in all educational institutions. Similarly teachers in the study also underlined the role of professional courses in building the teaching capacity of teachers.

In an interview made with teachers who are out of education in their undergraduate program they reflected as they would become a social worker, industrial worker and the like after their graduation, but fortunately they were assigned as instructor in this university. They didn't neglect the role of these courses in improving their teaching practice. This is the quote taken from one BA sociology teacher;

I don't have taken teaching courses in my undergraduate program, but now I am a teacher. Professional courses are very important in many aspects that is why I am attending higher diploma program. Of course, I am trying my best to make my students competent enough. I hope the university also prepares professional training on this issue for teachers like me.

This kind of teachers accounted for 36% of the samples in the study and they may share all the limitations which came as the result of not having the knowledge, skill and understanding of teaching and students learning. Variables like, experience, qualification/educational level, gender, nature of discipline are not significant in predicting teacher's perception of adopting high quality teaching approach.

Comparison between and among different groups of teachers

Independent t-test and ANOVA were the two statistical tools used in comparing the mean of different groups of teachers on the dependant variable. Accordingly, independent t-test was run to know if there is statistical difference between the two groups of educational level/qualification (bachelor and master holders) on adoption of HQTA.

Table 6 .Summary of t-test for the difference in qualification for adopting HQTA and bringing good practice of teaching

Variables	qualification	n	\bar{X}	Sd	t
Good practice of teaching	BA/BSc/BEEd	40	93.93	16.46	.44**
	MA/MSc.	26	88.23	20.71	
Adopting HQTA	BA/BSc/BEEd	40	51.90	14.69	1.24**
	MA/MSc.	26	50.35	15.49	

**p>0.05

The result shows that, there is no statistical difference between bachelors with a (M=51.90, Sd=14.69) and masters (M= 50.35, Sd=15.49) in adopting high quality teaching approach at (t =1.24, p>0.05). Similarly there is no significant difference between the two groups in bringing good practice of teaching with a mean and standard deviation of (93.93, 16.46) and (88.23, 20.71) for bachelors and masters respectively at (t = 0.44, p>0.05).

In addition to this, the mean score of teachers who had taken pedagogical courses and those who didn't take, were compared to identify whether there is statistical difference in adopting high quality teaching approach and in bringing good practice of teaching.

Table 7. Summary of t-test for knowledge of professional courses in adopting HQTA and bringing good practice of teaching

Variables	pedagogy	n	\bar{X}	Sd	t
Good practice of teaching	Yes	42	95.31	17.14	3.45**
	No	24	85.33	18.91	
Adopting HQTA	Yes	42	55.71	15.40	2.19**
	No	24	43.54	10.33	

**p<0.05

Accordingly, there is significant difference between teachers who had taken professional courses (M=55.71, Sd=15.40) and those who didn't (M=43.54, Sd=10.33) in adopting HQTA (t = 2.19, p<0.05). They are also significantly different in bringing good practice of teaching with (M=95.31, Sd=17.44) for pedagogically trained teachers and (M=85.33, Sd=18.91) for those who didn't trained at (t = 3.44, p<0.01)

Like the independent t-test, one way analysis of variance/ANOVA/ was also computed for the comparison of mean score of teachers in different groups of workloads and experience on the two dependant variables treated in the t-test.

Table 8. ANOVA summary statistics in workload difference for adopting HQTA and bringing good practice.

		Sum of Squares	df	Mean Square	F	Sig.
Good practice of teaching	Between Groups	3268.66	2	1634.33	5.56	.006
	Within Groups	18525.65	63	294.06		
	Total	21794.31	65			
High quality teaching approach	Between Groups	3442.91	2	1721.46	9.86	.000
	Within Groups	11004.61	63	174.68		
	Total	14447.53	65			

With this respect, there is statistical difference among the three groups of teachers having different workloads i.e. <6 crhr/week, 6-12 crhr/week and 12-18crhr/week in adopting high quality of teaching approach ($F(2,63)= 9.85, p< 0.001$) and in bringing good practice of teaching ($F(2,63) = 5.55, p<0.01$).

Similarly, ANOVA was run to compare the mean score of teachers in different experience group (i.e. <2 years, 2-5 years and 5-10 years) on the above dependant variables.

Table 9. ANOVA summary statistics for experience difference in adopting HQTA and bringing good practice of teaching.

		Sum of Squares	df	Mean Square	F	Sig.
Good practice of teaching	Between Groups	627.75	2	313.88	.93	.398
	Within Groups	21166.56	63	335.98		
	Total	21794.32	65			
High quality teaching approach	Between Groups	670.38	2	335.19	1.53	.224
	Within Groups	13777.15	63	218.69		
	Total	14447.53	65			

However, there is no statistical difference among the three groups in adopting HQTA ($F(2,63) = 0.93, p>0.05$) and in bringing good practice of teaching ($F(2,63) = 1.53, p>0.05$).

Cluster analysis for teachers

As a means of analyzing how, at the university level, individual teachers approach their teaching and bringing good practice of teaching in the university, a cluster analysis was conducted. The analysis was made at the component level of major variables. Standardized scores on these key variables were used in hierarchical cluster analysis using the between groups average method in identifying an

appropriate number of clusters (based up on the increasing value of the squared Euclidean distance between clusters). The analysis indicated that the two clusters solution was accepted. Accordingly, the result of all teachers in the two groups on key variables in the study in its standardized form was presented in the table below.

Table 10: Mean (and standard deviation) cluster scale Z-scores for HQTA, approach to teaching and components of good practice

	<u>Cluster 1</u>	<u>Cluster 2</u>	
	N (40) Teachers	N (26) Teachers	P
High Quality teaching approach	0.58(.84)	-0.89 (.34)	.000
Informn transmission teacher Focused	-0.42(1.01)	0.64(.54)	.000
Conceptual change student focused	0.60(.77)	-0.93(.48)	.000
Student teacher contact	0.64(.69)	-0.98(.45)	.000
Encourage cooperation among students	0.65(.64)	-1.05(.46)	.000
Encourage active learning	0.64(.62)	-0.98(.56)	.000
Prompt feedback	0.62(.55)	-0.97(.72)	.000
Time on task	0.58(.79)	-0.89(.55)	.000
Communicate high expectation	0.60(.69)	-0.93(.61)	.000
Respect diverse talents & ways of learning	0.58(.72)	-0.89(.65)	.000
Link assessment with teaching & learning	0.45(.93)	-0.79(.66)	.000

The two groups of teachers identified in cluster analysis shows coherent, but different sets of relations between variables. The first group includes 40 teachers who on average have better conception of teaching in its high quality than their 26 colleagues in the second cluster. They perceive teaching in its high quality and adopt conceptual change student focused approach in their teaching. In line with this, they are also bringing a permissive environment for students to learn better. Therefore, they are bringing good practice of teaching. The very important question here is that, who are these teachers? These 40 teachers who perceived teaching in its high quality and bringing good practice of teaching in the university are those, who have taken professional courses and who have less workload. This is clearly digested in the

previous analysis of correlation, multiple regressions and during the comparison among the groups. Therefore, 40 (61%) of teachers in this study reported as they conceive/perceive teaching in its high quality and adopt the CC/SF, which enabled them to be effective in bringing good practice of teaching. While the remaining 26 teachers which accounted for 39% of the sample perceive teaching in its low quality and they are not effective in bringing good practice of teaching as compared to their colleagues in cluster 1.

4.3. Analysis of data for students

Correlation between students perception of learning environment, adopted learning approach and CGPA

The relationships between these variables were computed and the findings portray a relationship which is anticipated in the literature or theory.

Table 11: Correlation between CGPA, context of learning and Learning approach

	1	2	3
Grade point Average (1)	-		
Context of learning (2)	.59	-	
Deep Approach (3)	.51	.68	-
Surface Approach (4)	-.29	.38	-.47

P < 0.01 (2-tailed).

It is understandable from the results that students perception of the learning environment correlated significantly and positively with deep approach ($r = 0.68$, $p < 0.01$) and CGPA ($r = 0.59$, $p < 0.01$). This implies that those students who perceive learning environment as supportive of their learning, adopt deep approach who can then achieve high GPA. This was qualitatively described by high achiever students in

the open ended question and during the interview session, as most of their department staffs encourage students to have maximum learning outcome.

Our teachers in my department encourage us to learn better, use different methods of teaching, they respect students' idea and they are also fair in grading, they encourage us to ask questions and participate actively in the teaching learning process”.

(High achiever student from Biology department)

Conversely, there is significant and negative correlation between learning environment (CEQ) and surface approach ($r = -0.38, p < 0.01$). These students are those who perceive the learning environment as less supportive of their learning and adopt surface approach to survive this challenging environment. Some students from different department have reflected their opinion regarding the learning environment as less supportive of their learning. The intention here is that, teachers provide reading materials for students which is directly linked to the exams. This really bounds students from discovering many things by them selves in referring different materials. Others also reflected the absence of smooth relationship between teachers and students, failure to include all students in the process and focusing only on few students as the possible factors which discourages students from benefiting more in the process. Therefore, in some cases the environment is not encouraging students to adopt deep approach. This is a quote taken from one low achiever (CGPA of 2.34) student;

The teaching learning process is not well organized due to lack of smooth relationship between teachers and students, they seem as they are recruited to teach only top five students therefore, it is better to me to strive to get pass marks in the exam.

It is also important to note the relationship between surface approach with CGPA ($r = -0.29$, $p < 0.01$). This shows that students, who adopt surface approach, have less GPA than those who adopt Deep approach. It is also interesting to look the relationship between deep and surface approach ($r = -0.47$, $p < 0.01$) which was significant and negative. This implies that students adopting one approach either deep or surface than relying on both approaches at a time.

To look the relationship among the components of learning environment and approach to learning, inter-correlation was made.

Table 12: Correlation between components of learning environment and learning approach

	1	2	3	4	5	6	7
Good teaching (1)	-						
Clear goals & stand.(2)	.69**	-					
App. Assessment (3)	-.14*	.13	-				
App. workload (4)	-.02	.23**	.69**	-			
Generic Skills (5)	.75**	.64**	-.05	.01	-		
Overall Satisfaction (6)	.68**	.61**	-.06	.05	.73**	-	
Deep Approach (7)	.67**	.56**	-.02	.06	.65**	.55**	-
Surface Approach (8)	-.27**	-.31**	-.22**	-.27**	-.28**	-.20**	-.473**

** $. P < 0.01$ (2-tailed).

* $. P < 0.05$ (2-tailed).

Among the components of learning environment as presented on the Table 12, the good teaching scale ($r = 0.67$), clear goals and standard scales ($r = 0.56$), generic skills scale ($r = 0.65$) and over all satisfaction ($r = 0.55$) are positively correlated at $p < 0.001$ with deep approach. No relationship was found on perception of appropriate assessment and appropriate workload with deep approach.

On the other hand, surface approach is correlated significantly and negatively with good teaching scale ($r = -0.27$), clear goals and standards ($r = -0.31$), appropriate

assessment scale ($r = -0.22$), appropriate workload ($r = -0.27$), generic skill scales ($r = -0.28$), and overall satisfaction ($r = -0.20$) at $p < 0.01$. The relationship resulted between components of learning environment and learning approaches is meaningful and as it was anticipated in the theory. As indicated in Table 12, the approach adopted by students is the reaction they have for the learning environment. Those students who perceive the components accounted the learning environment as less supportive of their learning, the more likely they will adopt surface approach and aim to score grades through simple strategy. Conversely, those students whose learning environment is supportive of his/her learning, he/she will adopt the deep approach to benefit more from their learning.

Multiple regression analysis of components of learning environment predicting the adoption of high quality learning approach (HQLA)

The composite and independent contribution or predicative strengths of students' gender and components of learning environment to the adoption of High quality of learning approach was computed. A multiple regression was run to examine such effects. Variables like gender (dummy coded form), good teaching scale, appropriate assessment, clear goals and standards, appropriate workload, generic skill scale and overall satisfaction were entered in to the analysis. Stepwise was the particular method employed for this analysis. In the first phase of the analysis the five elements of learning environment were entered and the contribution of the two elements found to be insignificant. Then the remaining three variables were entered in to the analysis all are found to be significant. Further analysis also made to see the effect of dropping variables from the three significant predictors but the result shows a

decrease in the percentage of the variance explained in adopting desirable learning approach, due to this these three variables were taken. Following this, good teaching, appropriate workload and generic skills scales were found to be significant contributors for student's adoption of high quality learning approach.

Table 13: Multiple regression analysis for the elements of learning environment predicting the adoption of high quality learning approach.

Predictors	B	SE	β	t
Good teaching	.79	.18	.34	4.28
Generic skills	.56	.15	.29	3.65
App. Workload	.83	.24	.18	3.48
R = .632 R ² = .399 Corrected R ² = .390				

** p<0.001 *p<0.01

As presented in Table 13, the only factors that significantly contributed to the variance in adopting HQLA were good teaching ($\beta = 0.34$, $t = 4.28$, $p < 0.001$), Generic skills ($\beta = 0.29$, $t = 3.65$, $p < 0.001$) and appropriate workload ($\beta = 0.18$, $t = 3.48$, $p < 0.01$). The variables in the model jointly explained 40 % of the variance in adopting HQLA ($R^2 = 0.399$, corrected $R^2 = 0.390$). This implies that, those teachers who are better in teaching skill, relating the real world to the students learning or students' experience with their learning and make students busy to work are much better in creating an environment which supports high quality students learning than those who are not qualified with these variables. This is also described in reflection part of the questionnaire and during the interview. The quote below is taken from one student's interview.

I like teachers who relate the content of the course with our experience in the real life. Therefore, the effort teachers make to encourage

students learning will result a good performance on the side of the learners.

(High achiever student from Management department)

The rest variables entered in to the analysis model i.e. gender, appropriate assessment and students overall satisfaction of the perceived environment, are not significant predictors of HQLA with the employed regression method which was a stepwise.

Comparison between/among different groups of students

Independent t-test was employed to know if there is significant difference between two groups on different dependant variables. As indicated previously, the equal variances of the groups was checked by levenes test (sig. >0.05) and then comparison was made. Accordingly, male and female score on both HQLA and perception of learning environment were computed.

Table 14. Summary of t-test for gender difference in perception of learning environment and adoption of HQLA

Variables	Sex	n	\bar{X}	Sd	t
Conception of learning Environment	Male	114	71.34	14.96	1.42**
	Female	98	68.39	15.25	
Adoption of HQLA	Male	114	47.43	14.11	1.16**
	Female	98	45.22	13.46	

**p>0.05

The result shows that, there is no statistical difference between male (M=71.34, Sd=14.96) and female (M=68.39, Sd=15.25) at (t = 1.41, p> 0.05) on conceptions of learning environment. Similarly, the score of males (M=47.43, Sd=14.11) on HQLA is not significantly different from that of females (M=45.22,

Sd=13.46) at ($t = 1.16, p > 0.05$). This is similar result with Richardson J. (1993) that concludes there was no consistent evidence of significant difference between men and women in terms of their scores on individual learning orientations/approach.

To see the difference of mean scores on perception of learning environment and adoption of HQLA as a function of CGPA, ANOVA was computed.

Table 15. ANOVA summary statistics for CGPA difference in perception of learning environment and adoption of HQLA

		Sum of Squares	df	Mean Square	F	Sig.
Conception of learning Environment	Between Groups	17987.56	4	4496.89	30.70	.000
	Within Groups	30326.37	207	146.50		
	Total	48313.93	211			
HQLA	Between Groups	10034.08	4	2508.52	17.12	.000
	Within Groups	30327.39	207	146.51		
	Total	40361.47	211			

The total range of CGPA were categorized in to five meaningful groups i.e. <2.00 very low, 2.1-2.54 Low, 2.55-3.00 medium, 3.1-3.54 high and 3.55-4.00 very high achievers. They are mutually exclusive (independent of each other) and their equality of variances were checked by levene's test and the use of ANOVA was justified. With this regard, there is significant difference among different groups of achievers i.e. <2.00 (M=51.66, Sd= 13.87), 2.1-2.54 (M=61.21, Sd= 14.97), 2.55-3.00 (M= 73.23, Sd= 8.97), 3.1-3.54 (M=78.10, Sd= 10.05) and 3.55-4.00 (M= 83.41, Sd=10.83) in perceiving their environment at ($F(4,207) = 30.70, p < 0.001$). Similarly, there is a significant difference among the five groups of achievers i.e. <2.00 (M=35.25, Sd= 15.02), 2.1-2.54 (M=39.04, Sd= 13.40), 2.55-3.00 (M= 49.86, Sd= 11.21), 3.1-3.54 (M=52.47, Sd= 10.63) and 3.55-4.00 (M= 55.67, Sd=10.65) in

adopting HQLA at ($F(4,207) = 17.12, p < 0.001$). If we look the trend in both cases, as the achievement level (CGPA) of students increase, the score they reported about their perception of the learning environment also increases. Similarly, the value students reported on the desirable learning approach also increases with their achievement level. The relationship between CGPA and perception of learning environment as well as CGPA and high quality learning approach is controversial with regard to the cause-effect relationship. Here, we couldn't decide whether high CGPA lead students to perceive their learning environment as supportive of their learning and adopt desirable learning approach or the perception of learning environment as supportive of their learning and adoption of desirable learning approach lead to high CGPA and the vice versa for low achievers.

However, the relationship shows a consistent increment of mean scores of students on perception of learning environment as supportive of their learning and in adopting desirable learning approach with increasing CGPA. One unique response obtained through interview from one student is that, he was not satisfied with the learning context of his department and his intention was towards the criteria of surface approach but he was in the category of high achievers. This is a contradicting idea with the results obtained from quantitative data. Therefore, there are some situations in which, students become successful on the exam by adopting surface approach but this is not a guarantee for his life in the work world

Cluster analysis for students

Similar to that of teachers, to know how individual students perceive their learning environment and approach their learning at the university level a cluster

analysis was conducted aimed at identifying subgroups of classes with similar scores on these key variables. The analysis was made at the level of component variables for learning environment and approach to learning. Standardized scores on these key variables were used in hierarchical cluster analysis using the between groups average method in identifying an appropriate number of clusters (based up on the increasing value of the squared Euclidean distance between clusters). Similar to that of teachers, the analysis indicated that the two clusters solution was the most acceptable. Accordingly, the result of all students in the two groups on key variables of the study in its standardized form was presented in the table below.

Table 16: Mean (and standard deviation) cluster scales Z-score for HQLA, approach to learning and components of learning environment

	<u>Cluster 1</u>	<u>Cluster 2</u>	
	N (158) Students	N (54) students	P
High Quality learning approach	0.34(0.89)	-0.99(0.56)	.000
Deep approach	0.40(0.76)	-1.17(0.64)	.000
Surface approach	-0.22(0.97)	0.63(0.80)	.000
Good teaching scale	0.43(0.69)	-1.26(0.62)	.000
Clear goals and standards	0.41(0.75)	-1.19(0.62)	.000
Appropriate assessment	-0.04(0.98)	.115(1.05)	.327
Appropriate workload	0.04(1.00)	-0.11(0.99)	.330
Generic skills scale	0.47(0.53)	-1.36(0.78)	.000
Overall satisfaction	0.40(0.74)	-1.18(0.68)	.000

The score of students identified in the cluster analysis shows consistent, but different sets of relations between variables. The first group composed of 158 students who, on average, have high quality learning approach than their 54 mates in the second cluster. They perceived the environment as supportive of their learning; adopt more of deep approach and less of surface approach than their mates in cluster 2. Therefore, 74.5% of the participants of students in this study reported as the learning

environment is supportive of their learning and are adopting deep approach. While the remaining 25.5% of students in the sample perceived their learning environment as less supportive of their learning and they have adopted more of surface approach.

The two groups i.e. cluster 1 and 2 have no significance difference in perceiving the environment in relation to appropriate assessment and workload. Theoretically, these two components of learning environment are assumed to be perceived differently by two groups of students adopting different learning approach. But, here it is not significant with the stated alpha.

Problems challenging the adoption of high quality teaching and learning approach

Answer for this question was explored through interview and the open ended questions. Many problems have been raised both by teachers and students while the source of the problem is geared toward themselves and the government. The response obtained from most teachers and students is that, either of them does not take themselves as the source of the problem. Rather teachers blame students as aimless and unfit for higher education while students list many problems from teachers' side.

To have clear understanding about the issues raised under this heading, lets' see them from the owner of the problem. During the interview session and open ended questions teachers mentioned students' background, lack of motivation, lack of responsibility, language deficiency from students side as the challenge for adopting high quality teaching approach.

On the other hand, some students have listed teacher ways of teaching and assessment, the dominancy of theory in their teaching, lack of respect for their

profession, lack of emphatic outlooks of teachers on students, as major problems from teachers' side.

Teachers and students in combination also raised lack of training for teachers (CPD) and lack of facilities i.e. laboratory, internet, reference books as problems challenging the teaching learning process on the part of the government. Lack of facility as the problem of the teaching learning process was raised almost by all teachers and students from natural science faculty who filled the questionnaire and participated in the interview.

CHAPTER 5: DISCUSSIONS

In this chapter, the results obtained in chapter four will be elaborated/discussed in relation to the basic questions of the study. Findings from other studies will also be presented to make the study more reliable. Finally, the implication of the results obtained in ensuring quality education will be discussed.

5.1 Teachers conception of teaching approaches

Research have shown that teachers at all levels hold personal conceptions of teaching which are developed from their long years of classroom experience as students and subsequently as teachers (Ramdsen 1992, Trigwell, Prosser & Tylor 1994). These and other researchers, explored the conception/beliefs teachers have about what teaching and related concepts are, through interview and semi structured questions. The findings of these studies have considerable commonality. The analysis of the teachers response have consistently shown a range from an emphasis on the teachers and content with the notion of transmitting information from the teacher to the students through to an emphasis on the students need to construct some sort of representation of the content with the notion of that the teachers role is to provide support and guidance to the student in that enterprise. The findings of this study also evidenced as teachers view their approaches of teaching differently. Most of teachers in the sample viewed their approaches as student centered while others are adopting teacher/content centered approach.

As it was indicated in the cluster analysis of teachers in Table 10, 40 teachers were identified as teachers who conceive teaching as conceptual change student focused. In addition these teachers are better in adopting high quality teaching approach. Really, it is a promising having this amount of teachers who conceive teaching in its high quality in Ethiopian context. The findings obtained by Yalew (2004) demonstrates as teachers seem to favor the traditional teacher centered approach. Therefore the finding of this study shows a change in the conception of teaching approach and it also provides a hope for stakeholders in education in the journey of ensuring quality education.

On the other hand, 26 teachers, which accounted for 39% of the samples perceived teaching in its low quality which particularly aimed at transmitting information through teacher centered. When we think the number of students under these 26 teachers and their identicals in the population, we might feel shock. Of course, IT/TF as an approach may not be condemned as it is valueless and less important in all context of teaching rather it can play its unique role by which the issue/content is not appropriate to be addressed by CC/SF approach. Proponents of CC/SF also agree that as an approach, CC/SF is not able to cure all problems raised in the teaching learning process.

In addition to knowing the number of teachers who conceive teaching as CC/SF and IT/TF, it is also important to know the background characteristics of these two different groups of teachers. Who are these two groups? As it was indicated in chapter four of correlation, multiple regressions, comparison of different groups, shows consistent findings. If we look in Table 4, workload, experience and

professional courses can be taken as important variables to discuss. As it was clearly indicated in the relationship workload and experience have with IT/TF is significant. The relationship between workload and IT/TF is significant in a positive direction. This is what we observe or do in our day to day activity. When teachers have high workloads especially if it is supported by large number of students in the classroom (Yalew, 2004), teachers prefer to present the course content in a simple lecture method and provision of handouts. Therefore, workload is one factor which can push teachers to have a conception of teaching as imparting facts and principles in the students.

The other very interesting finding which contradicts with Yalews' (2004) findings is the relationship between experience and IT/TF. As I reflected before, this is an impressive result that, teachers will not perceive teaching as IT/TF when they become experienced.

In Table 5, results from multiple regression analysis of variables predicting teachers' adoption of high quality teaching approach were indicated. In this table, workload and professional courses were found to be the most important variables which make teachers to perceive teaching in its high quality. As it was indicated in the correlation indices of Table 4, they were related directly with IT/TF.

Teachers' perception of teaching and its approach is also highly influenced by whether they have taken professional courses or not. As it was indicated in Table 5, professional courses predict teachers' adoption of high quality teaching approach. Those teachers who have taken professional courses perceive teaching in its high quality than their colleagues who didn't taken. This has great practical implication for the would be teachers and stakeholders. Now a day in Ethiopia, many individuals have

been assigned as instructor at different university of Ethiopia including Mizan Tepi University I am not arguing why these teachers are recruited with out having the skill and knowledge of teaching, because our country is in need of professionals in different sector. Rather the point should be how these instructors will develop their knowledge and skills, in order to teach their students better. I raised this point because conception and actual practice of teaching are directly related (this will be discussed latter). Therefore if teachers' conception of approach to teaching and their actual practice are related, there should be a focus on changing teachers' perception about teaching approach. To do this the workload assigned for teachers and developing their teaching capacity through in service training should be given a due attention. Ho A, Watkins D, and Kelly M (2001) found in their experimental research that, through in-service training there is a change in teachers conception of teaching which in turn positively affected their teaching practice. These two variables i.e. workload and professional courses, are predicting the variances between teachers to conceive teaching in its high quality. This implies that if the university prepares seminars, panel discussion and other short in service training programs, the conception teachers hold about teaching can be changed or developed to desirable/high quality conception. When we talk about teachers' conception and actual practice of teaching, we are directly dealing with students learning. Teachers teaching approach and students learning are highly related. Chrisatene and Gilbert in Entwistel (1991, p.202) found that, approaches to learning are influenced by lecturers' theories of teaching and by the ways in which knowledge is structured and presented.

5.2 Good practice of teaching and learning

The actual practices of teachers in the classroom context were assessed according to the seven principles of good teaching and learning in higher education. These principles include; student teacher contact, cooperation among students, active learning methods, prompt feedback, time on task, teachers expectation of students, and respect for diverse talents and ways of learning. These are the heart of teaching and learning in contributing in the assurance of quality education. In addition to these, the researcher added linking assessment with teaching and learning as one criterion to measure teachers' effectiveness in their teaching.

The relationships of these variables (elements of good teaching) within and between other variables were presented in Table 4. These variables are significantly correlated with conceptual change student focused approach. This is not a new finding because, in most studies conducted in this area, we get such kind of relationship. The answer for this is simple, because these seven principles were designed inline with the conceptual change student focused approach by making students at the center of the teaching learning process.

Teachers in educational institutions particularly of higher education are expected to have quality in these components of good practice. These quality starts from healthy contact between teachers and students. The tradition of our education by itself view teachers who present lesson in a more expressive way, dominating the class, give notes to students, strictly manage the class and tell the students what to do, as effective teachers. Habtamu in Yalew (2004, p.35) posited that the Ethiopian society mainly values authoritarianism way of teaching which instills in the students a

sense of conformity than creativity. According to the results of this study, there are two groups who have different values on this principle. Individuals in cluster 1 of this study which is composed of 40 teachers reported as they have good contact with their students than their 26 colleagues in cluster 2. Therefore, if teachers perceive teaching as CC/SF, the more they will have good contact with their students.

The second and third element of good practice is teachers' effort to create cooperation among students and employ active learning methods. Teachers in higher education should encourage students to work together in their learning, asking them to give constructive feedback on each others work and creating a conducive environment which helps students to learn better. As it was shown in Table 10, 26 teachers are deprived of these principles for which they scored less than their colleagues. If teachers do not practice these principles, they are closing the way for students not to share their values, experience and knowledge. In addition, if the environment is not active, students do not fell sense of ownership in their learning rather they passively receive what the teacher transmits. Learning environment should allow students to exchange their ideas, relate the content of the course to their real life, discuss and debate to explore new things and the like. Therefore, classroom teachers should create a conducive environment for students to enable them learn by them selves.

Time on task and prompt feedback are the other important elements through which teachers' effectiveness is measured. Similarly those teachers who scored high value on the above principles also reported high scores on these two variables. The extent to which teachers use the time in the classroom for academic purpose accounts for the first variable. Some teachers in my experience waste the time for discussion by

talking irrelevant issues which is not related to the content. At this time students will become bored. I believe that, if teachers inject some short fun stories in the process, students will become relaxed and it can be used as an enzyme for the teaching learning process.

Therefore, when teachers utilize the class time for academic purpose they and their students will benefit more. With this respect 61% (cluster 1) of teachers in the sample reported as they are utilizing the class time for academic purpose better than their colleagues in cluster 2. Similarly they also reported as they are better in providing timely feedback for students to look and improve their progression.

The other important principles are communicating students as they are expected to work hard and respecting diverse talents and ways of learning in the classroom. In a situation where teachers' conception of teaching is in IT/TF stance, it is difficult to think as students have something about the contents and expect them to perform in higher order. In this kind of teaching, students are to be blamed for their failure because the teacher assumes as he/she knows every thing of the course.

This kind of conception and practice is too dangerous for the aim of quality education. If teachers do not expect his/her students to do at higher level, so many things will remain hidden in the mind of students. But in a situation where teachers expect students to work hard, students will become creative of knowledge. To do this, teachers must consider diverse talents and ways of learning. Unless multivariate techniques are employed in the teaching learning process, it is too difficult to get the attention of all students in the process. McCombs and Whisler in Yalaw (2004, p.20) found that students become underachievers not only because they lack the competence

or the ability to do the task rather they may not value education for various reasons in which one could be the nature of the methodology that the teachers use in presentation of their lessons. 26 Teachers of the sample in this study have a score on these two variables which is less than their counter parts in cluster 1. This implies that, these teachers are not in position to expect students to accomplish their task in a higher level and are not treating students' diverse talent and ways of learning.

The last principle which the researcher believes as an important element in the teaching learning process is linking assessment with the teaching learning process. This is probably the instrument by which teachers evaluate the effect of the aforementioned principles on the teaching learning process and improving the whole process. When teachers link assessment results of students as an input for the improvement of the teaching learning process, they will bring good practice of teaching. This corresponds with the idea of 'assessment for learning', which is and should be a slogan in contemporary higher education. 40 teachers in the sample of this study reported as they are aligning assessment with their teaching and students learning.

Generally, 61% of teachers included in the sample are reported as they are better in bringing good practice of teaching than their colleagues which accounted for the remaining 39%. It is a great challenge to have this amount of teachers who are lagging behind from bringing good practice of teaching in the university.

5.3 Students perception of learning environment

A vast amount of research indicates when students are exposed to a particular context; they are differentially responsive to the learning environment, according to their perceptions of the teaching and learning context and its requirements (Biggs 2003, Ramdsen 1992, Entwistle 1991). As shown in the conceptual model of learning at the presage level, the learning environment is one factor which significantly determines students learning. The learning environment/context includes the situational factors ranging from institute, faculty, and department to course. At the course level, decisions are made about various aspects of the learning environment such as the format of the meetings, learning materials, the role of the teacher and the student, the degree of cooperation between students, the size of groups, the degree of self regulation, workload and assessment. Having these components of learning environment at the course level, students perception of these elements can vary based on their characteristics. Ramdsen(1992) underlined as the point of contact between the student and the learning environment is the previewed learning environment depicting a relationship between these two domains. It was evident that it is the students' perceived learning environment, rather than the objective learning environment that influences learning (Trigwell et al. 1996). Students in the same department can perceive their learning environment differently. This shows that, students' personal characteristics determine their perception about the learning environment. To discuss students perception of the learning environment and the adopted learning approach, Table 16 (cluster analysis for students) can be seen as a base. As it was indicated in the table, cluster 1 which is composed of 158 students are different from students in

cluster 2 (n=54) on the variables indicated there. Since the score in the table was in standardized form, we can compare the two groups confidently and the significance level is also indicated. Therefore, we have two distinct groups in our sample who have perceived the learning environment and adopted learning approach differently.

In cluster 1 (n=158), students have better score on components of learning environment i.e. good teaching scale, clear goals and standards, generic skills and overall satisfaction of the environment as compared to their counter groups. These individuals are those who perceived their learning environment as supportive of their learning. For these students staffs of their department motivates them to work hard, provide prompt feedback on their work, identify students difficulty and they are also good at explaining contents of the course and making their subjects interesting. Similarly, the staffs of their department for these students tell the standards of the work expected in each phase of the teaching learning process. In addition to this, students in this cluster perceived as the course they are attending developed their problem solving, analytical, creativity and skill in written communication. Beyond this, they perceived the course in their department developed their ability to work as a team member and inculcated a sense of self confidence in tackling unfamiliar problems. This implies that, these students perceived their learning environment as a context which encourages learning in its high quality.

On the other hand, students in cluster 2, reported low scores on the components of learning environment than their mates in cluster 1. These students perceived their staffs and the courses as less supportive of their learning. The staffs are not good in motivating, commenting students work, understanding students' difficulty, providing

feedback, and even in explaining their course content and making interesting for students as perceived by students of this cluster. Students of this group also have difficulties in identifying what is expected of them and the standards of the course. Beside these they viewed the course in their department as less important in developing problem solving, analytical, communication skill and ability to work as a team member. They also reported as the course didn't create a sense of confidence in tackling unfamiliar problems. Finally, they were not satisfied with quality of teaching in their department.

The perception of the two groups on appropriate assessment and workload is not significantly different. As it was indicated the significance level for the two groups on these two variables is too large. Therefore, we can take these two variables as perceived by the groups similarly. This is to mean that, the two groups' perception of these two variables is not different and these variables are not good at differentiating these distinct groups.

5.4 Students approach to learning

Students choice of approach is to some extent determined by his/her past experience, but this only describes part of the picture...the nature of the course as perceived by students is an important determinant of the choice of approach (Entwistle 1991 and Ramsden 2003). In this study 158 students have better score on deep approach than their friends in cluster 2 (n = 54). The reverse is true for surface approach which was scored as high in cluster 2 (n = 54) and less in cluster 1.

In cluster 1 (n = 158), students fell to see the content of the course in depth, they always work hard in their studies and come to the class with questions in mind which resulted from their reading. These students are interested in challenging work which demands critical reasoning and creativity. They are also satisfied when the class time is highly covered by them through discussion, debate, group work etc rather than teacher's transmission of contents. These students reported as they are focusing on 'learning for the sake of knowledge' rather than mere completion of the program through getting high scores.

These students use some strategies to put their motive in to practice. Therefore, 158 students in the sample perform enough work on each topic to make their own conclusion; they also go beyond the contents dealt in the classroom, focus on understanding the main concepts of the topic, even these students reported as they spend their free time in finding out additional information on the topics discussed and the like. These are some of the strategies through which students in this cluster realize their motive for learning.

On the other hand students in cluster 2 (n=54) adopted surface approach as the preferred learning approach. For these students the perceived learning environment in which they are learning or it may be their past experience do not encourage them to adopt deep approach which characterized by understanding and creativity. Rather these students are going through, with the intention to pass the course by doing little work, to score on exams through memorization rather than understanding and they reported as they don't like to see points which do not appear in the exam. They realize

their intention by focusing only on what is given out in class and the course outline, repeatedly reading the note provided by teachers until they recall it.

5.5. Relationship between perceptions of learning environment and learning approach

As it was indicated in Table 12, the significant correlations between the CEQ scales like good teaching, clear goals and standards, generic skills and overall satisfaction and the scores on deep approach were uniformly positive, where as those between the CEQ scales and the score on surface approach were uniformly negative. This general pattern supports the suggestions of previous research (Richardson, 2010, p.198) that students perception of the academic quality of their courses are positively related to their adoption of desirable approaches to studying and are negatively related to their adoption of less desirable approaches to studying. But the relationship of appropriate assessment and workload with deep approach are not inline with the above assumptions.

As it is also shown in cluster analysis, there are two groups who have different values on components of learning approach and learning environment. In cluster 1 (n=158) students adopted deep approach in their learning are those who perceived their learning environment as supportive of their learning. This shows that, if teachers in one department are better in creating an environment which is conducive for students learning, students will adopt a deep approach in their learning. Conversely, 54 students who perceived the learning environment as less supportive of their learning reported as they adopted a surface approach.

As I tried to know the major predictors from components of the learning environment for the variance of adopting desirable (high quality) learning approach, I aligned the two different approaches as one variable which is high quality learning approach. Having this single variable from the two scores of learning approach, multiple regression was run to know the effects of each components on adoption of HQLA. Accordingly, good teaching scale, generic skills and appropriate workload are found to be significant predictors for the adoption of HQLA.

From the five suggested learning environment, clear goals and standards and appropriate assessment are not as such significant in enabling students to adopt desirable learning approach. Rather, if teachers have good teaching skill, incorporate generic skills in their teaching and provide students appropriate workload, students will be encouraged to adopt an approach which is high quality. Therefore, building teachers capacity/skill/ of teaching and enable them to put an effort to relate the content of the course to the real life the students are the major issues to be considered.

5.6 Problems challenging the adoption of high quality teaching and learning approach

Students' background, lack of motivation, lack of responsibility, language deficiency and the like are some of the problems raised on the part of students. Of course students may have different background, level of motivation, attitude, interest and other problems related with their learning and these factors are determinant in the teaching learning process including the preferences for approach. Lecturers in their every day experience are blaming lower school teachers for not preparing students who fit for tertiary education. Whatever the problem students have, we never send

them back to preparatory or secondary schools in order to fill their deficiency, rather the point should be how we can improve their poor quality. It is obvious that students experience in lower schools contributes a lot for their success as well as failure in tertiary education. Therefore, it is better for lower school teachers to put a great effort in their teaching and enable students competent enough in their next education level. This also benefits the lower school teachers as not to be blamed by other teachers who proceed to teach these students. Having these in mind, what should the university lecturers do? Ramdsen (2003) in his book entitled enhancing students learning, he suggested that, sophisticated technology are not needed to enhance students learning rather teachers skill and creativity of teaching takes the central point. Since students' motivation, attitude, learning style and the like can be changed; why not teachers can enable students to learn up to their optimal effort. As to me this demands for teachers' commitment for the profession, to students learning and the community at large. Teachers are pedagogists; pedagogy is going first; therefore, if teachers take appropriate actions in the teaching learning process, students will recover from their weakness. I believe that, rather than blaming students about their background, motivation, attitude, responsibility, teachers should focus on changing these limiting factors in to desirable one.

In addition, ways of teaching and assessment with the dominancy of theory in the teaching learning process are problems mentioned on the side of teachers. Even though these points are discussed directly or indirectly in chapter four, they are mentioned here as the possible factors challenging students in adopting HQLA. Still the possible answer for these factors also geared towards teachers. They are expected

to employ different techniques of teaching to include all students in the classroom and relating the content to the real life of students.

The government should also play its part in fulfilling the facilities needed for the teaching learning process. Lack of in-service training for teachers and lack of facilities are the two major problems raised from the government side. As it was indicated in Table 1, 39% of teachers in the sample have not taken professional courses and they have scored low point on conception of teaching approach in its high quality. Similarly, they are not good in bringing good practice of teaching. This shows that, lack of knowledge in pedagogical courses is limiting teachers from adopting desirable teaching approach. Lack of facilities like laboratory, internet access, reference materials are the other hindering factors of the teaching learning process. These are very important to look the theoretical content with practical application especially in hard sciences. They are also essential in broadening students' horizon of knowledge. Therefore, these things should be given a due attention for the betterment of the teaching learning process.

5.8 Implication for quality education

As the report from individual teachers in the sample shows, two third of them are in a good position in bringing good quality teaching and learning. These individuals reported as they are employing different techniques in their teaching. This shows that, HERQAs threshold for quality teaching was meeting to some extent. Though it is not at all, the result ensures the HERQAs strategy on quality teaching was practiced by the instructors of this university. But a considerable large number of teachers (39% of the sample) reported as they are following a traditional teacher

centered approach which is against the strategies for quality assurance. This indicates, additional works should be made in developing teachers understanding and skills of quality teaching. The number of teachers who reported as they are adopting teacher focused approach seems less than those who employed a student focused strategy. But when, we think of the number of students attending their lesson under these teachers, we are obliged to put a great effort to redirect these teachers to the desired track. Therefore, since teachers are the main executive body of the curriculum, the role they are playing in ensuring quality education is vital.

Beside this, the result from students shows as the context in which they are attending their lessons was supportive of their learning. For these students learning is consisted of understanding, creativity and analytical which highly enable them to become problem solvers in different situation. Of course there are also others who relied on low quality learning approach. Great effort should be made for these students to change their approach of learning towards higher equality. If there is also internal quality assurance agency who preaches the culture of quality in the university, the quality of teaching learning process can be enhanced.

CHAPTER 6: SUMMARY, CONCLUSION AND RECOMENDATION

In this part the main points of the research from the introduction, methodology, finding and discussion would be presented. In addition the major findings of the study were concluded and finally recommendations were forwarded for the improvement of the process.

6.1. Summary

The main purpose of the study was examining the extent to which teachers and students are adopting desirable teaching and learning approach respectively. Then, the following basic questions were posed by the researcher as roads to investigate the problem.

1. To what extent do teachers are adopting desirable (high quality) teaching approach?
2. To what extent do teachers' are effective in bringing good practice of teaching in the University?
3. How students perceive the environment (particularly of their department) in which they are learning?
4. What learning approaches students use in higher education institutions? What are the factors for their choice of the particular approach?
5. What are the problems challenging the effectiveness of the teaching learning process?

Mizan –Tepi University teachers and students were the target population of this study. The population is composed of 238 teachers and 2300 students under six faculties. From these, three faculties were included in this study purposively.

Departments were selected through simple random sampling to represent their corresponding faculties. Finally, 72 teachers and 230 students were selected from these departments according to their background characteristics through stratified random sampling. The study was mixed in its approach, which is more of survey in its design and supplemented by information collected from individual cases qualitatively which is termed as “concurrent explanatory” design in mixed approach.

Questionnaire and semi structured interviews were employed to collect data from the sample. Before conducting the actual study, the Questionnaire was piloted to check its reliability. Accordingly, Cronbach alpha of items reliability were computed and appropriate measures were taken on items which have low fits with the rest items in the subscale. The interview was employed mainly to explore important information on the study from participants’ perspective. This was used to supplement the data obtained through questionnaire. Quantitative and qualitative methods were used in analyzing the data obtained. Correlation, multiple regression, ANOVA, independent t-test and cluster analysis were the statistical tools used to analyze the quantitative data.

Accordingly, the analysis revealed a positive and significant correlation between workload and approach to teaching. Specifically, work load positively and significantly related with IT/TF but, negative relationship with CC/SF. The relationship between experience and ITTF is significant in a negative direction. Similarly, there is a significant but negative correlation between ITTF and the seven components good practice. Conversely, the correlation between components of good practice of teaching and CCSF is significant and positive. From variables of teachers’ background; workload and professional courses jointly explained 36.4% of the

variance on the adoption of HQTA ($R^2 = 0.364$, corrected $R^2 = 0.344$). Other variables like experience, qualification, gender, and faculty type are not significant in contributing for the variance of adopting desirable teaching approach. Though it is not expected theoretically, the study resulted as there is no significant difference between bachelor and master holders in adopting HQTA as well as bringing good practice of teaching. But, there is statistical difference between teachers who have taken professional courses and those who didn't in adopting desirable teaching approach and in bringing good practice of teaching. ANOVA also resulted a significant statistical difference among the three groups of teachers who had different workloads in adopting HQTA and in bringing good practice of teaching. However, adoption of HQTA and bringing good practice of teaching are not a function of experience. The cluster analysis identified as 40 (61%) of teachers in the sample are adopting high quality teaching approach and are bringing good practice in the university than their colleagues in cluster 2 ($n = 26$ or 39%). The analysis identified statistical significant contrasts on all variables.

On the side of students, the result shows significant relationship between learning environment and approach to learning. Similarly, academic performance significantly related with approach to learning. The results from multiple regression analysis shows; Good teaching skill, generic skills and appropriate workload are good predictors for students adoption of HQLA. These variables jointly explained 40% of the variance in adopting desirable (high quality) learning approach ($R^2 = 0.399$, corrected $R^2 = 0.390$). The independent t-test evidenced that perception of learning environment and adoption of high quality learning approach are not a function of

gender. But, ANOVA result revealed the existence of statistical difference among the five groups of achievers in perceiving their learning environment and adopting HQLA.

The cluster analysis identified as 158 (75%) of students perceived their learning environment as supportive of their learning and adopted desirable (high quality) learning approach. Conversely, students in cluster 2 (n=54, 25%) perceived their learning environment as less supportive of their learning and adopted more of surface approach and scored less value on desirable learning approach. The analysis identified statistically significance contrast on all variables except appropriate assessment and appropriate workload.

6.2. Conclusions

Based on the analysis and discussions made, the following conclusion could be forwarded:

1. The strategies designed by HERQA have been practiced to some extent by Mizan-Tepi University instructors with some challenging problems. Most instructors included in the sample are implementing the strategies designed by HERQA by adopting desirable teaching approach and are bringing good practice of teaching.
2. The context of the environment in which students learn influence the approach to follow in their learning. Those students who perceive their learning environment as supportive of their learning adopts deep approach in their learning. On the other hand, students who perceive the learning environment as less supportive of their learning adopts a surface approach.

3. Teachers teaching skill, relating the contents to the real life of students and provision of appropriate workload by the teachers are the factors contributing a lot for students to adopt a desirable (high quality) learning approach.
4. Students' academic performance is influenced by the approach followed in their learning. Gender is not a factor for students' to perceive the learning environment and adopt HQLA differently.
5. Most of the students at Mizan-Tepi University are adopting desirable (high quality) learning approach.
6. The problems emanating from the management body, teachers and students are limiting the optimal contribution of the teaching learning process for the assurance of quality education.

6.3. Recommendations

Having the relationship between variables in the study and the possible problems raised, the researcher forwarded his suggestion to improve the teaching learning process to its desired quality.

1. The management of the university (especially institute of pedagogical science) should facilitate/prepare in-service training to improve the teaching skill of teachers.
2. The management body should also fulfill the facilities (like laboratory room and equipment, internet, reference books) needed for the teaching learning process.
3. Teachers should develop their teaching skill, relate students experience with the content and provide appropriate workload for students.

4. Teachers should practice teaching approach which is more of student centered.
5. Students should adopt desirable (high quality) learning approach. Because, this enables them to benefit more from their learning which can in turn develop their self confidence in world of work. In addition they must give attention for their learning, fell a sense of ownership, learning for the sake of knowledge should be their notion rather than learning for the sake of certification.
6. In departments where teachers have high workload, additional teachers must be recruited. The management of the university is responsible for this.

References

- Ashcroft, K. (2004). The massification of higher education; a comparison of the UK experience and the emerging Ethiopian response, *The Ethiopian Journal of Higher Education*, 1(1), 21-40.
- Barr, R. B. & Tagg, J. (1995). From teaching to learning: A new paradigm for Undergraduate education, Retrieved from <http://ilte.ius.edu/pdf/BarrTagg.pdf> on 19/09/2010
- Bigge, M. L. & Shermis, S.S. (2004). *Learning theories for teachers* (6th ed). London: Pearson education Inc.
- Biggs, J., Kember, D. & Leung D.Y.P. (2001). The revised two factor study process questionnaire: R-SPQ-2F, *British Journal of Educational Psychology*, 71,133-149
- Biggs, J. (1996). Enhancing teaching through constructive alignment, *Journal of Higher Education*, 32(3), 347-364. DOI: 10.1007/BF00138871
- Biggs, J. (2003). Aligning teaching and assessing to course objectives. Retrieved from <http://event.ua.pt/iched/main/invcom/p182.pdf> on 14/09/2010
- Buckley, C. A. et al. (2010). Students approach to study, conception of learning and judgments about the value of networked technologies, *Active Learning in Higher Education*, 11(1),55-65, DOI: 10.1177/1469787409355875
- Case, J. & Marshal, D. (2004). Between deep and surface: procedural approach to learning in engineering education contexts, *Studies in Higher Eeducation*, 29(5), 605-614, DOI: 10.1080/0307507042000261571

- Chickring, A. & Gamson, Z. (1987). Seven principles for good teaching in undergraduate education. Retrieved on 02/09/2010 from <http://www.aahea.org/bulletins/articles/sevenprinciples1987.htm>
- Cliff, A. F. (1998). Teacher-learners conceptions of learning: Evidence of a 'communalist' conception amongst postgraduate learners, *Higher Education*, 35(2), 205-220.
- Daniel Desta, (2004). Observation and reflection of the higher education teachers on the quality of teaching a learning in higher education in Ethiopia, *The Ethiopian Journal of Higher Education*, 1(1), 63-81.
- Devlin, M. (2006). Challenging accepted wisdom about the place of conception of teaching in university teaching improvement, *International Journal of Teaching and Learning in Higher Education*, 18(2), 112-119.
- Devlin, M. (2007). The criteria of effective teaching in changing higher education context, *Higher Education Research and Development*, 29(2), 111-124
- Draffan, E. A. & Rainger, P. (2007). A model for the identification of challenges to blended learning. In J. K. Seale (Ed), *Approaches to developing accessible learning practices; conceptualizing best practices*. London: Routledge. pp.55-68
- Ellis, A.K. (2001). *Teaching, learning and Assessment in higher education: The reflective professionals*. London: Sage publication.
- ETS, (2003). Standardized testing for outcome assessment: analysis of the educational testing systems MBA tests. Retrieved on 02/08/2010 from <http://www.faqs.org/periodicals/201003/1984269191.html>

- Entwistle, N. J. (1991). Approaches to learning and perceptions of the learning environment: Introduction to the special issue, *Center for Research and Instruction*, 10(12), 201-204.
- Falchikov, N. (2005). *Improving Assessment through students involvement: practical solution for aiding learning in higher and further education*. New York: Rutledge Falmer.
- Fentsmacher, G. D. & Soltis, J. S. (2004). *Approach to teaching: Thinking about education series* (4th ed). New York: Teachers college press.
- Firdissa Jabessa (2005). Active learning versus the traditional lecture methods of teaching at higher education institutions, *The Ethiopian Journal of Education*, 25 (1), 49-77.
- Hartley, et al. (2005). *Enhancing Teaching in higher education: New approaches for improving students learning*. New York: Rutledge
- Hativa, N. (2000). *Teaching for effective learning in higher education*. Dordrecht: Klumer academic publishers.
- Fry, H., Ketteridge, S. & Marshall, S.(2003). Understanding student learning. In Fry H., Ketteridge S. & Marshall S.(Eds). *A handbook for teaching & learning in higher Education*, pp.9-25. London: Kogan publication.
- Ho, A., Watkins, D. & Kelly M. (2001). The conceptual change approach to improving teaching and learning, *Journal of Higher Education*, 42(2), 143-169.
- Johnson, B. & Christensen, L. (2008). *Educational research: quantitative, qualitative and mixed approaches* (3rd Ed.). California: Sage publication Inc.

- Joshi, N.C. (1978). *Perspectives on higher education: critical issues analyzed*.
New Delhi: Ashi publishing house.
- Kember, D. (1996). The intention to both memorize and understand: Another approach to learning? *Journal of Higher Education*, 31(3), 341-354.
- Leslie, S. et al. (2002). *Teaching quality, teachers' quality and school improvement*
U.S.: Bloomington.
- Marton, F. & Saljo, R. (1976). On qualitative differences in learning: I – outcome and process, *British Journal of Educational Psychology*, 46, 4-11.
- Merriam, S.B. & Caffarella, R.S. (1999). *Learning in adulthood: A comprehensive guide* (2nd ed.). San Francisco: Jossey-Bass.
- Murray, K. & McDonald, R. (1997). The disjunction between lecturers conception of teaching and their claimed educational practice, *Journal of Higher Education*, 33(3), 331-349.
- OECD, (2009). Learning our lesson. Review of quality teaching in higher education.
Retrieved on 19/08/2010 from <http://www.oecd.org/edu/imhe/qualityeducation>.
- Perrott, E. (1982). *Effective teaching: A practical guide to improve your teaching*.
New York: Longman Inc.
- Ramdsen, P. (1991), 'A performance indicator of teaching quality in higher education: The course experience questionnaire', *Studies in Higher Education*, 16:
retrieved on 13/08/2010 from
<http://planning.flinders.edu.au/downloads/surveys/WhatIsTheCEQ.pdf>

Ramdsen, P. (1992). *Learning to teach in higher education*. New York: Rutledge.

Ramdsen, P. (1992). Learner centered learning/LCL. Deep and surface learning.

Retrieved on 28/09/2010 from <http://wikieducator.org/learner-centered-learning>.

Ramdsen, P. (2003). *Learning to teach in higher education (2nd ed.)*. New York. Rutledge falmer.

Ranson, S. (1996). Towards a theory of learning, *British Journal of Educational Studies*, 44(1), 9-26.

Rao, V. K. (2003). *Quality education*. New Delhi: PH publishing house.

Richardson, J. (1993). Gender differences in responses to the approaches to studying inventory, *Studies in Higher Education*, 18(1), 3-13.

Richardson, J. (2010). Perceived academic quality and approaches to studying in higher education: *Scandinavian Journal of Educational Research*, 54(2), 189-203, DOI:10.1080/00313831003637972.

Stiggins, R. (2004). *Classroom assessment for students learning: doing it right, doing it well*. USA: Assessment Training Institute

Trigwell, K., Prosser, M. & Ginns, P. (1996). Congruence between intention and strategy in university science teachers approaches to teaching, *Journal of Higher Education*, 32(1), 77-87.

Trigwell, K., Prosser, M. & Ginns, P. (2005). Phenomenographic pedagogy and a revised approach to teaching inventory, *Journal of Higher Education Research and Development*, 24(4), 349-360, DOI: 10.1080/07294360500284730

Trigwell, K. Prosser, M. & Tylor, P. (1994). Qualitative differences in approaches to teaching first year university sciences, *Journal of Higher Education*, 27(1), 75-84.

Walker, M. (2006). *Higher education pedagogies. A capabilities approach*. London: McGraw Hill House.

Watkins, D. et al. (1991). Does confidence in the language of instruction influence a student's approach to learning? *Journal of Instructional Science*, 20, 331-339.

Yalew Endawoke (2004). Teachers' beliefs, knowledge and practice of learner centered approach in schools of Ethiopia, *The Ethiopian Journal of Education*. 24(2), 17-39.

APPENDICES

Appendix A

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
INSTITUTE OF EDUCATIONAL RESEARCH

Questionnaire for Teachers

I would like to express my heartfelt thanks and appreciation for your time and sincere cooperation to fill in this questionnaire. The questioner is designed to assess the approach adopted by teachers in their teaching and your own practice in the teaching learning process at Mizan-Tepi University. The result and success of this study will highly depend on the quality of your response and I hope you will give accurate and honest responses to the items presented. Your response will be *kept confidential and used only* for this academic purpose.

Directions:

- No need of writing your name.
- Put “√” in the space provided in front of each item.
- The questionnaires has four parts and try to fill all the items.
- Please choose the one most appropriate response for you to each question.

Part One: Background Information

1. Faculty: _____ Department _____
2. Sex: Male Female
3. Educational level: BA/BSc MA/MSc
4. Teaching Experience in year: <2 2-5 5-10 >10
5. Work load in credit hour per week: <6 6-12 12-18 >18
6. Have you taken pedagogy courses? Yes No

Part One: Items related with teachers approach to teaching

This part of the questionnaire has 17 items about your conception to teaching approach and your usual way of teaching. There are five alternatives for you and their value is indicated as follows.

1=*strongly disagree* 2=*disagree* 3=*undecided* 4=*agree* 5=*strongly agree*

No	Items	1	2	3	4	5
1	It is important to present a lot of facts to students so that they know what they have to learn for the subject.					
2	I think an important reason for running teaching sessions in this subject is to give students a good set of notes.					
3	I should know the answers to any questions that students may put to me during my subject.					
4	I structure my teaching in the subject to help students to pass the formal assessment items.					
5	In my teaching, I provide the students with the information they will need to pass the formal assessment.					
6	In my subject I focus on the good presentation of information to students.					
7	My teaching in the classroom focuses on delivering what I know to the students.					
8	I set aside some teaching time so that the students can discuss, among themselves, key concepts and ideas of the subject					
9	In my interactions with students in my subject, I try to develop a conversation with them about the topics we are studying.					
10	In teaching sessions in my subject , I deliberately provoke debate and discussion					
11	I make available opportunities for students in my teaching to discuss their changing understanding of the subject.					
12	I encourage students to restructure their existing knowledge in terms of the way of thinking about the subject that they will develop					
13	It is better for students in my subject to generate their own notes rather than copy mine.					
14	I see teaching as helping students develop new ways of thinking.					
15	I felt that my course had to be an opportunity for students to reveal their changed conceptual understanding.					
16	Teaching in my subject should help student question their own understanding of the subject matter					
17	Teaching in my subject should include helping students find their own learning resources.					

Part two: Items related to effectiveness of your teaching practice

This items emphasize on the day to day practice of your teaching and fill honestly to the extent you apply them in the teaching learning process. There are five alternatives for you and their value is indicated as follows.

1= Only rarely 2= Sometimes 3= Partially 4=Frequently 5= Always

No	Items	1	2	3	4	5
1	I try to get to know, my students by their name.					
2	I have arranged consultation hour for my students and I always punctual					
3	I employ different activities in class-discussion, lecture, group or pair work.					
4	I encourage my students to work together in their learning.					
5	I ask my students to give constructive feedback on each other's work.					
6	I employ small group discussion, collaborative projects in and out of class, group presentation in the teaching process.					
7	I try to relate the contents of discussion to the real life situation of students.					
8	I try to create conducive environment for students to make hot discussion.					
9	I give quizzes and homework assignments to help students monitor their progress.					
10	I return examinations promptly, preferably within a weak.					
11	I expect students to complete their assignments promptly.					
12	I divide the class in to timed segments so as to keep on task.					
13	I try to meet with students who fall behind to discuss their study habits, schedules.					
14	I will be energized and enthusiastic in my interaction with students.					
15	I give students an opportunity to revise their work.					
16	I tell my students, as I expect them to work hard.					
17	I try to use a range of teaching activities to address a broad spectrum of students					
18	I try to identify students learning style, background at the beginning of the semester.					
19	I employ different activities in class-discussion, lecture, group or pair work.					
20	I use different assignment methods-written, oral, projects etc. so as to engage as many ways of learning as possible.					
21	I give my students a real-world problem to solve that has multiple solutions.					
22	I treat assessment as an integral and prominent component of the teaching and learning process rather than a final adjunct to it.					

23	In my class, there is a clear alignment between expected learning outcome, what I thought and what students learn, and the knowledge and skills assessed.					
24	I focus to assess the capacity to analyze and synthesis new information and concepts rather than simply recall information previously presented.					
25	I design the assessment tools to assess only subject specific knowledge and skills rather than generic skills.					
26	I try to minimize plagiarism/cheating through careful task design, explicit education and appropriate monitoring of academic honesty.					
27	In my teaching, I employ assessment to look students' progress in their learning.					
28	I use students result on the assessment, only to give grade rather than to improve the teaching learning process.					

Part four: your general view about the teaching learning process.

Here you are expected to write your opinion with respect to the following questions.

1. How do you see your' way of teaching in encouraging students learning?

2. What are the problems challenging the quality of teaching learning process?

3. How do you see the role of assessment in enhancing your teaching and students learning?

4. What do you suggest for the improvement of the teaching learning process?

5. How do you see the way you teach in improving the quality of the teaching learning process?

Thank you!

Appendix B

**ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDY
INSTITUTE OF EDUCATIONAL RESEARCH**

Interview guiding questions for teacher

The purpose of this interview is to gather information from teachers regarding major issues raised in the questionnaire in order to support interpretation of the data that were gathered through the questionnaire.

1. How do you describe your way of teaching?
2. How do you see the influence of your way of teaching on students learning?
3. What effort do you make to enhance students learning?
4. How do you see the role of assessment in the teaching learning process?
5. What are the problems hindering the effectiveness of the teaching learning process?
6. How do you see the whole practice of the teaching learning process in ensuring quality education?
7. What do you suggest to improve the teaching learning process?

Thank you!

Appendix C

ADDIS ABAB UNIVERSITY
SCHOOL OF GRADUATE STUDY
INSTITUTE OF EDUCATIONAL RESEARCH

Questionnaire for Students

I would like to express my heartfelt thanks and appreciation for your time and sincere cooperation to fill in this questionnaire. The questionnaire is designed to assess the approach adopted by students in their learning and your view about the effectiveness of your department in the teaching learning process. The result and success of this study will highly depend on the quality of your response and I hope you will give accurate and honest responses to the items presented. Your response will be kept **confidential and used only** for this academic purpose.

Directions:

- No need of writing your name.
- Put “X” in the space provided in front of each item.
- This questionnaire has four parts therefore try to fill all the items.
- Please choose the one most appropriate response to each question.

Part One: Background Information

1. Faculty: _____ Department _____

2. Sex: Male Female

3. CGPA: <2.00 3.1-3.54

2.1-2.54 3.55-4.00

2.55-3.00

Part two: Items related with learning approach

This questionnaire has 15 items about your attitude towards your studies and your usual way of studying. There is no right way of studying. It depends on what suits your own style and the course you are studying. Please choose the one most appropriate response to each question. There are five alternatives for you and their value is indicated as follows.

1=only rarely 2=sometimes 3=about half the time 4=frequently 5= always

No	Items	1	2	3	4	5
1	I fell that virtually any topic can be highly interesting once I get in to it.					
2	I work hard at my studies because I find the material interesting					
3	I come to most classes with questions in mind that I want answering.					
4	I find that I have to do enough work on a topic so that I can form my own conclusions before I am satisfied.					
5	I find most new topics interesting and often spend extra time trying to obtain more information about them.					
6	I test my self on important topics until I understand them completely.					
7	I spend a lot of my free time finding out more about interesting topics					
8	I make a point of looking at most of the suggested readings that go with the lecturers.					
9	My aim is to pass the course while doing as little work as possible.					
10	I find I can get by in most assessments by memorizing key sections rather than trying to understand them.					
11	I find it is not helpful to study topics in depth. It confuses and wastes time, when all I need is a passing acquaintance with topics.					
12	I see no point in learning material which is not likely to be in the examination.					
13	I only study seriously what is given out in class or in the course outline.					
14	I generally restrict my study to what is specifically set as I think it is unnecessary to do any thing extra.					
15	I believe that lecturers shouldn't expect students to spend significant amounts of time studying material every one knows won't be examined.					

Part Three: Items related with students evaluation of their department

Here you evaluate the whole practice of your department staffs and courses rather than single course or one instructor. There are five alternatives for you and their value is indicated as follows.

1=*strongly disagree* 2=*disagree* 3=*undecided* 4=*agree* 5=*strongly agree*

No	Items	1	2	3	4	5
1	The teaching staff of my department motivated me to do my best work.					
2	The staff put a lot of time in to commenting on my work.					
3	The staff made a real effort to understand difficulties I might be having.					
4	The teaching staff normally gave me helpful feedback on how I was doing.					
5	My lecturers are extremely good at explaining things in the course.					
6	The teaching staff worked hard to make their subjects interesting.					
7	It was always easy to know the standards of work expected.					
8	It was often hard to discover what was expected of me in the course.					
9	The staff made it clear right from the beginning what they expected from us.					
10	The staff seemed more interested in testing what I had memorized.					
11	Too many staff asked me questions just about facts.					
12	The work load is too heavy					
13	There was a lot of pressure on me to do well in the course.					
14	The total volume of work...couldn't all be thoroughly comprehended					
15	The course in my department developed my problem solving skills					
16	The courses in my department sharpened my analytical skills					
17	The courses improved my skills in written communication.					
18	The courses helped me to develop the ability to plan my work					
19	The courses helped me develop my ability to work as a team member.					
20	As a result of my courses, I fell confident about tackling unfamiliar problems					
21	Over all, I was satisfied with the quality teaching in my department.					

Part four: your general view about the teaching learning process.

Here you are expected to write your reflection with respect to the following questions.

1. How do you see the relationship between the way teachers teach and your learning?

2. How do you see the effectiveness of teachers in your department in the teaching learning process?

3. What are the problems challenging the quality of teaching learning process?

4. What do you suggest for improving the teaching learning process?

Thank you!

Appendix D

**ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDY
INSTITUTE OF EDUCATIONAL RESEARCH**

Interview guiding questions for students

The purpose of this interview is to gather information from students regarding major issues raised in the questionnaire in order to support interpretation of the data that were gathered through the questionnaire.

1. How do you describe your way of learning?
2. Why do you prefer this approach in your studying?
3. How do you see the way teachers are teaching?
4. What are the problems hindering the effectiveness of the teaching learning process?
5. How do you see the role of assessment in the teaching learning process?
6. How do you see the whole practice of the teaching learning process in ensuring quality education?
7. What do you suggest to improve the teaching learning process?

Thank you!

Appendix E

The use of the questionnaire

	Scales and subscales	Item number
For Teachers	1. Scales for Approach to teaching	
	Information transmission intention	1,2,3
	Teacher focused strategy	4,5,6,7
	<i>Informn Transmission Teacher Focused approach</i>	1,2,3,4,5,6,7
	Conceptual change strategy	8,9,10,11
	Conceptual change intention	12,13,14,15,16, 17
	<i>Conceptual change Student Focused approach</i>	8,9,10,11,12,13,14,15,16,17
	2. Subscales of good practice of teaching	Items 1-28 below
	Student instructor contact	1,2,3
	Encourage cooperation among students	4,5,6
	Encourage active learning	7,8
	Prompt feedback	9,10
	Time on Task	11,12,13
	Communicating high expectations	14,15,16
Respect diverse talents and ways of learning	17,18,19,20,21	
Linking assessment with teaching and learning	22,23,24,25,26,27,28	
For students	3. Subscales for learning environment	
	<i>Perception of learning environment</i>	Items 1-21 below
	Good Teaching Scale	1,2,3,4,5,6
	Clear Goals and Standard Scale	7,8,9
	Appropriate Assessment Scale	10,11
	Appropriate work Load Scale	12,13,14
	Generic Skills Scale	15,16,17,18,19,20
	Over all satisfaction	21
	4. Subscales for Approach to learning	
	Deep Motive	1,2,3
	Deep Strategy	4,5,6,7,8
	Deep approach	1,2,3,4,5,6,7,8
Surface Motive	9,10,11,12	
Surface Strategy	13,14,15	
Surface approach	9,10,11,12,13,14,15	

Note: HQTA is obtained by reversing the score of teachers on IT/TF and summing up with the score on CC/SF while, HQLA is obtained by reversing students score on Surface approach and adding to the score on Deep approach.

Appendix F

Reliability of items in pilot and actual study

Variables (scales and subscales)	Pilot (n=17,17)	Actual study (n=66,212)
	α	α
Scales for Approach to teaching		
<i>Informn Transmission Teacher Focused</i>	.598	.924
Information transmission intention	.696	.831
Teacher Focused Strategy	.634	.882
<i>Conceptual change Student Focused</i>	.660	.931
Conceptual change Strategy	.762	.860
Conceptual change intention	.755	.900
<i>High quality teaching approach</i>	-	.943
Scales for Good practice of teaching		
<i>Good practice of teaching</i>	.779	.941
Student teacher contact	.701	.733
Encourage cooperation among students	.521	.770
Encourage active learning	.500	.779
Prompt feedback	.647	.788
Time on Task	.750	.654
Communicating high expectations	.693	.651
Respect diverse talents and ways of learning	.747	.651
Linking assessment with teaching and learning	.802	.691
Scales for Learning Approach		
<i>Deep Approach</i>	.846	.911
Deep motive	.781	.821
Deep strategy	.849	.858
<i>Surface Approach</i>	.784	.896
Surface Motive	.648	.847
Surface Strategy	.815	.804
<i>High quality learning approach</i>	-	.914
Scales for Learning Environment		
<i>Perception of learning environment</i>	.804	.902
Good teaching scale	.758	.907
Clear Goals and Standard Scale	.713	.371
Appropriate Assessment Scale	.889	.716
Appropriate work Load Scale	.806	.742
Generic Skills Scale	.861	.918

Declaration

I hereby declare that this thesis is my original work done under the guidance of Prof. Derebssa Dufera, and has not been presented for any degree to any university and that all relevant sources used are duly acknowledged.

Name: *Matheas Shemelis*

Signature: 

Date of submission: 14/02/2011

ADDIS ABABA UNIVERSITY
LIBRARIES
P.O. BOX 1176
ADDIS ABABA ETHIOPIA

ADDI CITY

ADDIS ABABA ETHIOPIA

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

Name: Derebssa Dufera (Prof.)

Signature: 

Date: 14/02/11

ADDIS ABABA UNIVERSITY

ADDIS ABABA ETHIOPIA