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Re-Conceptualizing the Instructional Processes in Universities and Teacher Education Colleges of the Amhara Region, Ethiopia

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ABSTRACT
This study focused on the re-conceptualization of the instructional processes in Universities and Colleges of Teacher Education (CTEs) of the Amhara Region. The research design utilized was descriptive survey type with mixed approach analysis. Data was gathered from a total of 204 instructors, department heads and deans via questionnaire, semi-structured interview, focused group discussion and document analysis. The reliability coefficient of the questionnaire was computed using Chronbach alpha as 0.82. Data was analyzed using both a quantitative and qualitative data analysis techniques. Quantitatively, percentage, mean, standard deviation, independent samples T-Test, and one Way-ANOVA were computed. Besides, the interview, focus group discussion and document analysis data were analyzed using qualitative data analysis technique. The main findings of the study were: there was a significant difference on the utilization of instructional planning and the implementation of continuous assessment techniques between Universities and CTEs. CTEs were found to be having good practices in preparing and implementing the instructional plans and the utilization of different continuous assessment techniques than the sample Universities. But significant difference was not observed in the application of different active learning strategies (both utilize mostly teacher centered approach). Those active learning methods that need higher order thinking were not in place. Attitudinal problems to conduct instructional plans; lack of knowledge and commitment in implementing different active learning methods and assessment for learning; over load works of instructors; large class size and shortage of time and the block delivery of modularization approach were found to be major factors affecting the effectiveness of the instructional processes both in the Universities and CTEs. To sum up, the link among instructional planning, method of teaching and continuous assessment is slack.
Key words: Re-conceptualization, Instructional process, instructional planning, active learning, continuous assessment.

I. Introduction

1.1. Background of the Study

Quality levels vary widely from one education system to another and, within a single education system, there may be sharp variations in quality (for example between public and private schools, between urban and rural schools, and between education for the majority and education for minorities) (UNESCO, 2006). This Unevenness of quality is therefore a critical issue facing education systems. These different pressures have resulted in the concept of the 'quality of education' coming to the fore as learners, parents and communities, educators, leaders, and nations acknowledge that what is learned and how learning occurs is as important as access to education (UNESCO,2006). Therefore, the primary concern of education is learning.

Research into quality teaching (Entwistle, 2000; Shuman, 2002; Warren Little, 2003 in Reece and Walker, 2003:11) illustrates that quality teaching involves instructional planning and managing learning effectively, use a variety of active learning strategies and promoting and actively engaging in professional and personal development continually and evaluating students' learning experiences continuously. The instructional process comprises three basic steps that are aligned one another. The first is planning instruction. The second step involves delivering the planned instruction to students that is, teaching them. The third step involves assessing how well students learn or achieve the expectations or outcomes. That is, the planned instruction should be logically related to the actual instruction and the assessments should relate to the plans and instruction. All three steps in the instructional process involve teacher decision making and assessment (Keeves, 1994).

Planning, teaching and assessment are the three interactive components of educational instruction (Brookhart, 1999). Planning involves the establishment of instructional objectives and learning outcomes which leads to decisions about the types of learning activities that will enable students to successfully achieve the required outcomes. The desired learning outcomes and instructional activities then guide the assessment techniques. Finally, the assessment results direct, and even modify, the teaching approach (Darling-Hammond and Bransford, 2005).

In educational language, the first task of teacher or instructor is planning learning (Reece and Walker, 2003) since it has many importance (Borich, 1988; Ramsdon, 1992). An effective teacher starts with what he/she wants his/her students learn (the objectives), go through 'entry behaviour' (what the student already know about the

topic), teaching methods (this involves experiences and reflections), to assess how much has been learned and finally the feedback (Reece and Walker, 2003). As the two authors stated in the impact of evaluating good teaching, instructional planning, teaching methods and assessment has direct relationships.

Teaching methods are the means by which the teacher attempts to impart the desired learning experience (Kasambira, 1993 in Marton and Saljo, 1997). Effective teaching does not necessarily bring effective learning. If learning is to occur, careful organization of classroom activities based on clearly stated objectives, content, conclusion and assessment are essential (Kasambira, 1993 in Marton and Saljo, 1997). The same author added that for any classroom teacher or instructor to attempt to teach a class without the assistance of the lesson plan is analogous to an airplane pilot's taking-off to a new destination without a cart (*ibid*).

On the other hand, assessment is one of the defining features of the students' approaches to learning (Entwistle and Entwistle, 1991; Marton and Saljo, 1997; Ramsden, 1992). The research findings of Marton and Saljo (1997) implied that students' perceived assessment requirements seem to have a strong relation with the method or approach to learning (surface or deep) a student adopts when talking an academic task. Similar findings from Ramsden (1992) indicated that inappropriate assessment procedures encourage surface approach to learning, yet varying the alternative assessments evoke deep approaches to learning.

Effective assessment strategies should promote student competence (Wlodkowski and Ginsberg, 1995) and improve the quality of teaching (Austin, 1993). Assessment of the student is necessary for identifying where to start instruction, planning remedial action for students, identifying student learning difficulty, improving teaching methods or aids, planning activity wide groupings of students and grading students (Reece and Walker, 2003; USAID,2010). Therefore, assessment for learning is seen as an integral aspect of the teaching and learning cycle (Ramsden, 1992). From the view point of these authors it is impossible to separate assessment and teaching. Nevertheless, the assessment of students' learning is not well understood and, in most disciplines, an under researched aspect of higher education (Fry et al, 2004).

1.2. Statement of the problem

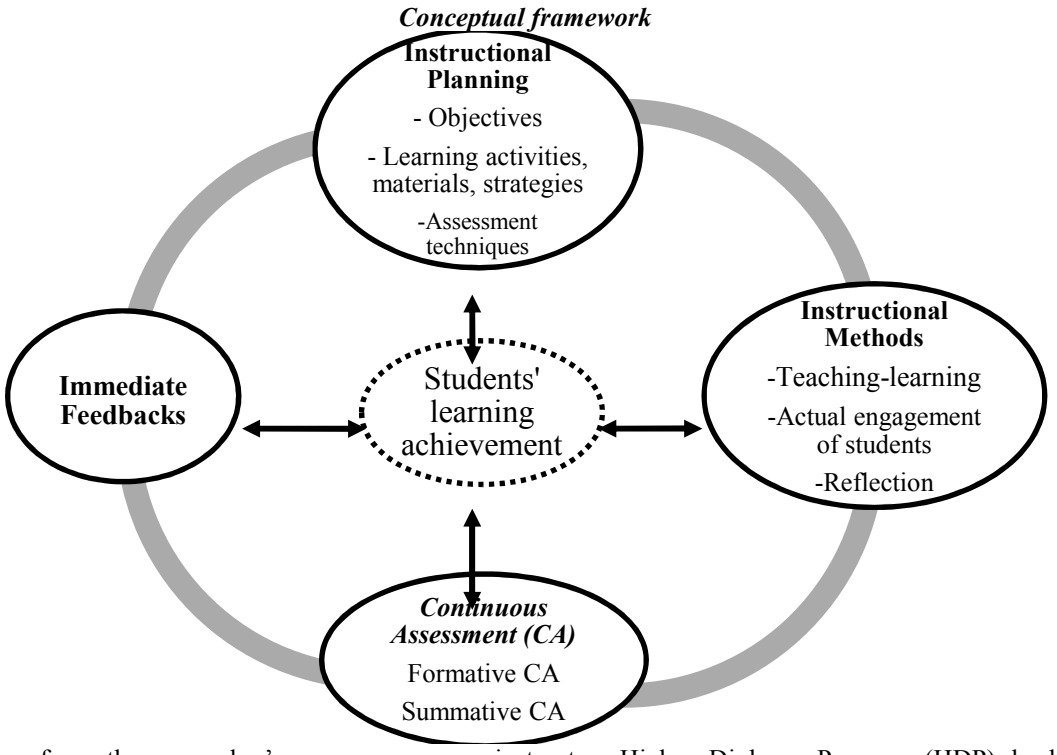
The past decade has seen an explosion of interest among the higher institutions in the teaching methods variously grouped under the terms active learning and cooperative learning (Bonwell and Eison, 1991; Johnson et al., 1991; Meyers and Jones, 1993; Silberman, 1996). A large amount of research attests to the benefits of active learning (Sokoloff and Thornton, 1997). However, there remains much misunderstanding and mistrust of the pedagogical movement behind the research.

In Ethiopia, research on teaching-leaning process has shown that students in higher learning institutions memorize specific facts and skills that help them to be promoted from one to another level of education (Reda, 2001). The majority of the institutions still teach their classes in the traditional lecture mode. However, the educational lens is now focused not on teaching but on leading learning communities. This time, there is a paradigmic shift from teaching to learning (Ramsdon, 1992); and assessment of learning to assessment for learning (Horgan and Bonfield 1999). Teachers have four roles- planning, organizing, directing and controlling. A good teacher or instructor plans effectively for student involvement and learning, gives clear learning objectives and uses a wide variety of active learning methods. Therefore, students are provided with the skills necessary for studying and learning. A good teacher encourages students, is reflective, treats all students fairly and is a competent assessor (Ramsdon, 1992).

From this frame work an effective teacher should first plan his/her instruction and based on the plan he/she has to deliver the teaching-learning process through the active engagement of learners. Continuous assessment is always there and providing constructive feedback for the learner in order to enhance student's achievement and also improve the plan on the basis of feedbacks obtained for the next time. It is these intertwined process that helps students' learning empowerment.

Currently, in order to bring quality education both the Ministry of Education and the Amhara Regional State Education Bureau (ARSEB) focused on the use of instructional planning, a variety of active learning methods and different continuous assessment techniques in the Universities and College of Teacher Educations (CTEs). Thus, instructors of the Universities and CTEs in the country and the regions are expected to prepare a course plan and daily lesson plan while teaching their lessons so as to promote active learning strategies. Besides, formative continuous assessment is given due emphasis in order to improve the teaching-learning process and students' achievement through continuous feedback. The primary purpose of assessment in education is to improve learning. However, in practice continuous assessment exercises in many programs are poor at least in terms of giving feedback and in motivating further learning (Singh, 2006).

Even though the contents or courses, level of students and their specialization varies among institutions, faculties and departments, the mission of both the Universities and CTEs is the same i.e producing competent and productive students in their field of specialization. To achieve the expected goal, effective instructors both in the Universities and CTEs are expected to conduct the instructional processes in a well designed and organized manner.



However, from the researcher's exposure, as an instructor, Higher Diploma Program (HDP) leader and researcher, both in the Universities and CTEs, there are missing elements in the preparation and application of instructional planning, the delivery of a variety of active learning methods and the application of different continuous assessment strategies. This intern implies the teaching-learning process should be re-assessed and re-conceptualised. The main purpose of this study was to assess the extent to which instructors were using instructional planning, a variety of active learning methods and continuous assessment techniques during the instructional processes.

To this end the study tried to answer the following leading questions.

1. To what extent do teacher educators of the Universities and CTEs prepare the instructional planning, implement a variety of active learning methods and use continuous assessment techniques?
2. Is there a significant difference between University and CTEs instructors in the application of instructional planning, different active learning methods and various continuous assessment techniques? Is there a difference across faculties and departments?
3. How do University and CTE instructors and principals conceive effective teaching?
4. What are the factors that are affecting the implementation of effective teaching-learning process in the Universities and CTEs?

2. Research Methodology

2.1. Design of the Study

For this study descriptive survey research with mixed - methods design was applied. Data was obtained from three Universities namely Wollo University, Woldia University and Debre Tabor University and three CTEs namely Dessie, Woldia and Begimeder of the Amhara Region. From the different faculties of the three Universities, Social Science and Humanities faculty, Natural and Computational Science faculty, Educational and Behavioral Science faculty and all departments of the three CTEs were taken as the sample areas.

Instructors from the aforementioned faculties of the three Universities and the three CTEs were taken as samples for this study. Besides, deans from the faculties or colleges, department heads, quality assurance coordinators of the universities and colleges and Teacher- Director- Supervisor (TDS) workers in CTEs were taken as additional samples.

2.2. Sampling techniques

The three Universities and three CTEs were selected purposely due to their proximity in location. In each University three faculties with two of their departments and all five departments of the three CTEs were taken as samples. Therefore, multi - stage sampling technique was employed to select representative faculties, departments and instructors. First, the three faculties of each University (i.e Social Science and Humanities faculty, Natural and Computational Science faculty and Educational and Behavioural Science faculty) were

selected purposely since courses of these faculties are also given in CTEs though the level of difficulty varies. In the case of CTEs, all departments were chosen purposefully. Thus, a total of eighteen departments from Universities and fifteen departments from CTEs were selected using judgmental sampling.

Seven instructors from each department (a total of 231) were chosen using simple random sampling. Out of two hundred thirty one sample instructors, only two hundred four (103 from CTEs and 101 from Universities) who filled the questionnaire properly were direct representatives and the remaining twenty seven who do not properly fill or not returning the questionnaire were deliberately discarded. Moreover, college or faculty deans and vice deans, department heads and quality assurance coordinators were selected using purposive sampling technique.

2.3. Data gathering tools and methods of analysis

The main data gathering instruments for this research were: questionnaire (both close-ended and open-ended questions), semi-structured interviews and focused group discussions and document analysis. Documents (prepared course plans, daily lesson plans, course guide books, course outlines and different continuous assessment results) were analyzed. A pilot study was conducted to test the reliability of the questionnaire for instructors in a single University and College. Besides, the items of the questionnaire was checked and rechecked by colleagues for its face validity. The reliability coefficient of the subscales of the improved questionnaire was computed using Chronbach alpha as .82.

The collected data was organized in the form of tables and analyzed and interpreted using both a quantitative and qualitative data analysis techniques. To analyze quantitative data, the data was coded and entered into SPSS-19 version. Then the quantitative data was analyzed using graphs, percentage, mean, standard deviation, independent samples T-Test, and one Way-ANOVA. Besides, the interview and Focus Group Discussion (FGD) data were analyzed and interpreted using qualitative data analysis technique i.e using thematic analysis and descriptive analysis.

3. Results and Discussion

After obtaining the results from the Universities and CTEs, discussions in relation to reviewed literature have been made. Since similar issues were presented to different respondents for the purpose of triangulation, it was categorized into various themes and analyzed and presented the issues and trends in a holistic perspective. The themes categorized were:

3.1. Instructional Planning

Instructional planning is one of the prior tasks to be considered by higher education institutions. Therefore comparisons were made between Universities and CTEs regarding the use of instructional planning.

Items	Institute	N	Mean	Standard deviation	t	df	P
Instructional planning	CTE	103	42.8155	4.04811	8.709*	202	.000
	University	101	37.3069	4.94923			

* P < 0.05

Table-1: Mean difference of instructors of CTEs and Universities in the application of instructional planning (Independent Samples T-Test)

There was a significant difference on the utilization of instructional planning between Universities and CTEs. (t=8.709*, P<0.05 at df=202). That is, the mean value of CTEs (42.8155) is greater than the mean values of the Universities (37.3069).The data indicated that CTEs were found to be more effective in utilizing the instructional planning for their teaching-learning process than the Universities.

Higher Education Institutions are the main sources of the trained personnel. It is from this institution a well planned and well organized activities are expected. However, the result indicated that sample Universities are not in a position to prepare the daily lesson plan and course plans. Many research findings implied that guided by a plan has much importance. Supporting the above idea, Borich (1988); Danielson (2007); Kasambira (1993) in Marton and Saljo (1997) and Perkins (1992) implied that preparing a lesson plan is important to show the direction where the teacher /instructor is going, what he/she is doing and why he/she is doing that. Kasambira (1993) in Marton and Saljo (1997) further added that for any classroom teacher or instructor to attempt to teach a class without the assistance of the lesson plan is analogous to an airplane pilot's taking-off to a new destination without a cart. A teacher's planning and preparation affect instruction, and all these are affected by the reflection on practice that accompanies a lesson (Danielson, 2007). Planning eliminates bias in classroom teaching, show directions, avoids unnecessary repetitions for teachers (Borich, 1988); knowing the 'entry behaviour' of students, teaching methods and assessment techniques used by the teachers and finally the feedback (Reece and Walker, 2003) and to motivate learners (Perkins, 1992).

Some instructors from Universities and CTEs also strongly argued that preparing a lesson plan is simply wastage of time, energy and resources. For instance, interviewees from Woldia University strongly conjectured that:

> *We have many years of teaching experience. We know what we will do in the class. So, putting what we already know in a piece of paper is just duplication and wastage of time, energy and resources.*

Teachers' experience and conception regarding planning affects the way they are preparing it or not for their classroom teaching. For example, researchers found that when planning, experienced teachers make more extensive mental plans than written plans and rely less on curriculum materials than their less experienced counterparts (Bush, 1986; Leinhardt, 1983; Livingston and Borko, 1990).

To bring the expected change up on the students, the instructors should plan the lesson in a committed and enthusiastic manner. Otherwise, planning without interest in a controlled way or by the direct order of the top officials could not bring satisfactory result. Similar findings of Austin Independent School District (2010) posited that on careful inspection, the lesson design really do not support development of knowledge and skills that are expected of students. Others still argued that it is difficult to overstate the importance of planning. Planning limits students' free learning. Planning is not the end result (Peterson and Clark, 1978; Duchastel and Merrill, 1973; Yelon and Schmidt, 1973 in Darling-Hammond and Bransford, 2005). Therefore instructors must state clear objectives in their plan and it is to check these objectives assessment should be made. However the relationship between the stated objectives and assessment is found to be very low.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1710.522	5	342.104	17.114*	.000
Within Groups	3957.890	198	19.989		
Total	5668.412	203			

*P < 0.05

Table-2: Summary of One Way-ANOVA: The application of instructional planning between CTEs and Universities

In order to see the presence of significance difference among the three Universities and CTEs in the preparation and application of instructional planning, one way ANOVA was employed and statistically significant difference was obtained ($F_{5,198}$) = 17.114, *p< 0.05). For the mean comparisons, the Scheffe multiple comparison test clearly indicated that Begiemeder CTE used instructional planning more than the others (44.3871) followed by Woldia CTE (42.3714) and Dessie CTE (41.9189). Whereas, Wollo University with mean values (36.75), Debere Tabor University (37) and Woldia University (38.4286) applied instructional planning less than the CTEs.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1422.801	9	158.089	7.224*	.000
Within Groups	4245.610	194	21.885		
Total	5668.412	203			

*P<.05

Table-3: Summary of One Way-ANOVA: Differences of faculties and departments in the application of instructional planning

Similarly, a statistically significant difference was obtained among faculties and departments in the use of instructional planning ($F_{5,198}$) =7.224, *p< 0.05). As the Scheffe Multiple Comparison Test indicated most diploma program departments of the CTEs (Mathematics, Health and Physical Education and Language) have high performance in preparing the instructional planning. Nevertheless, almost all degree program faculties (Natural and Computational Science, Social Science and Humanities and Educational and Behavioral Sciences) were found to be the lowest in preparing the instructional plans. They were only preparing course outlines and course guide books.

3.2. Active Learning

Under this part comparisons between Universities and CTEs and their faculties and departments were made regarding the application of different active learning methods.

Items	Institute	N	Mean	Standard deviation	t	df	P
Active learning	CTE	103	45.3786	4.95295	-.037	202	.971
	University	101	45.4059	5.57168			

P >0.05

Table-4: Mean differences on the application of active learning methods between Universities and CTEs (Independent Sample T-Test)

Regarding comparisons between Universities and CTEs in the implementation of different active learning techniques using Independent Sample T-Test, significant difference was not observed (t= -.037, P > 0.05 at df = 202). That is, the mean value of CTEs (45.3786) is nearly the same with the mean values of the Universities (45.4059). This discloses that there was no significant difference observed between the selected CTEs and Universities in the application of different active learning methods.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	233.299	9	25.922	.936	.495
Within Groups	5373.328	194	27.698		
Total	5606.627	203			

($F_{9, 194}$) =.936, P> 0.05

Table-5: Summary of One way ANOVA: Difference on the application of active learning methods by different faculties and departments

The result of one way-ANOVA ($F_{5, 198}$) =.012, P>.05) also indicated no significant difference among the three Universities themselves and among the different faculties of the three Universities and different departments of the three CTEs ($F_{5,198}$) =.936, P>.05).

Besides, in the given questionnaire, 204 instructors of the Universities and CTEs were asked to rate about the different active learning methods they were mostly applying in their classroom in a rank order. Those most frequently selected active learning methods were tallied and listed in descending order.

Methods of teaching	%	Methods of teaching	%
Lecture method	86	Experiment method	24.9
Discussion method	83	Picture analysis method	24
Question and answer method	81	Role playing method	24
Gapped lecture method	64	Field visit method	22
Demonstration method	55	Model construction method	21
Brain storming method	53	Diamond ranking method	19.2
Independent work method	51	Think -pair- share method	17
Matching exercise method	48	Spider diagram method	17
Project method	41	Future wheel method	13.5
Debate	38	Inquiry method	11
Mind mapping method	35	Problem solving method	8
Case study method	28	Hot seating method	5
Classification method	26.5	Golden fish bowl method	3
Pyramiding method	26	Mastery learning method	2.8
Ice breaking method	25.8	Discovery method	3.6
Reciprocal questioning method	25	Balloon Gaming method	2

Table-6: Different active learning strategies frequently applied by instructors in percentage

Though different courses, contents and activities need different active learning methods, from the above table, it is inferred that most instructors of Universities and CTEs still are applying the traditional methods of teaching (lecture method 86 percent; question and answer method, 83 percent; demonstration, 55 percent). From the results above, instructors are teaching or preaching active learning through their passive teaching. This clearly implies that instructors were not in a position to convey the appropriate contents with the appropriate methods of teaching by varying their methods.

On the other hand, the most widely applied active learning method was the discussion method (83 percent). Those active learning methods that require higher order thinking such as problem solving (8 percent), inquiry method (11 percent), mastery learning (2.8 percent), discovery learning (3.6 percent) and the like are not applied by most instructors of both the Universities and CTEs.

Even though, as is the case in many countries, the education policy of Ethiopia vividly depicted that the pedagogical implications of constructivism- active learning methods or student-centred teaching would govern instructional practices in schools or institutions (TGE, 1994), those active learning methods that require higher order thinking such as problem solving (8 percent), inquiry method (11 percent), mastery learning (2.8 percent) and discovery learning (3.6 percent) were not applied by most instructors of Universities and CTEs. On the same token, the research findings of Dawit (2008); Reda (2001) disclosed that although the constructivist approach has been well documented in the literature, its effective implementation in Ethiopian Higher Education is scant.

In order to enhance students' learning, the active involvement of the students should be in focus since quality teaching is based on the premise that all teachers should teach well and all students should learn well. Similarly, Ramsden (1992) in Livingstone (2001:12) stated that "the aim of teaching is simple: it is to make student learning." The learner is active when he/she is engaged mentally and motivationally in a task (Livingstone, 2001).The most powerful and positive learning outcomes occur in those contexts where students' knowledge and interests are well matched to the nature of learning task and when the students were actively involved in the lesson (Reece and Walker, 2003). Students should not be seen as passive vessels to be filled with the knowledge provided by the faculty during lecture hours, but active constructors of knowledge and demonstrators of skills (Frazee et al, 1995; Reece and Walker 2003; Silberman, 1996).

3.3. Continuous Assessment

The following part discusses with the application of continuous assessment in Universities and CTEs.

Items	Institute	N	Mean	Standard deviation	t	df	P
Continuous Assessment	CTE	103	41.9369	5.13431	2.778*	202	.006
	University	101	40.0000	4.81456			

*P<0.05

Table-7: Mean differences on the application of continuous assessment by instructors of Universities and CTEs (Independent T-Test)

The result of one-sample t-test analysis shows a significant difference between CTEs and Universities in the application of different continuous assessment techniques in the classroom teaching-learning process (t=2.778*, P<0.05 at df = 202). That is, the mean value of CTEs (41.9369) is greater than the mean values of the Universities (40). This revealed that CTEs were found to be better than the Universities in the application of different continuous assessment techniques.

Even though sample CTEs were found to be better than Universities in the application of continuous assessment, their focus on formative continuous assessment (assessment for learning) was very low. The focus was on assessment of learning (summative continuous assessment). A variety of continuous assessment strategies such as independent work, practical tasks, reflective activities, portfolios, demonstration performances, authentic assessment, peer and self assessment were not note worthily applied. The data obtained through interviews and focus group discussion also support the same results. The interview results of some instructors from Debre Tabor and Wollo Universities elucidated that:

> *Most of the time, they used few techniques of continuous assessment such as repeated paper and pencil tests, group assignments and final examinations. These assessment techniques were applied basically for grading purpose.*

The research findings also proved that different continuous assessment exercises in many programs in the classroom teaching-learning process are poor in terms of giving feedback and in motivating further learning (Singh, 2006). Even though, portfolios, self and peer assessment, simulations and other innovative methods were introduced in higher educational contexts (Struyven et al., 2005), in practice, the use of different continuous assessment techniques in the universities and colleges were not satisfactory.

Assessment is a crucial element of the teaching-learning process if it is used in a versatile form to check the students' performance and provide the necessary feedback. Carefully designed assessment is a powerful tool for educators to improve the teaching-learning process (James et al., 2002). Because of the inseparable nature of assessment and instruction, assessment influences instruction either positively or negatively. The nature of teachers' assessment predicts teachers' methods of teaching (surface or deep). The research findings of Marton and Saljo (1997) also implied that students' perceived assessment requirements seem to have a strong relation with the method or approach to learning. Similar findings from Ramsden (1997), indicated that inappropriate assessment procedures encourage surface approach to learning, yet varying the alternative assessments evoke deep approaches to learning (Entwistle, 1994).

Concerning the application of continuous assessment, the other focus group discussants from Wollo University and Dessie CTE further expound that:

> *Their focus was mostly on summative continuous assessment i.e for grading purpose than improving students' learning by providing timely feedback. The reasons they mentioned for this was overloaded works, large class size, shortage of time due to the block course delivery, lack of commitment and devotion to implement various strategies.*

Assessment is used for checking the learners' readiness and understanding the effectiveness of teaching approaches that should be in place (USAID, 2010) and finally to check whether the students are achieving the expected goals or not (Brookhart, 1999). More specifically, assessment for learning is seen as an integral aspect of the teaching and learning cycle that helps to improve students' achievement (Black and Wiliam, 1998). The research findings of different scholars also publicized the same. For instance, effective assessment strategies should promote student competence (Wlodkowski and Ginsberg, 1995) and improve the quality of teaching (Austin, 1993) and enhances students' learning (Brown & Knight, 1994; Elwood and Klenowski, 2002; Ramsdon, 1992). The other focus group discussants from Dessie and Begiemeder CTE, regarding their continuous assessment utilization, similarly elucidated that:

> *Even though we are used different continuous assessment techniques, it was not dictated by our daily lesson plans and course plans. We lacked remembering and joining what is planned and what is expected to measure and achieve.*

The result above indicated that even though instructors are using different continuous assessment techniques, they were not guided by their lesson plans. Mostly, the objectives they stated in their plans were not congruent with the assessment techniques they applied. This entails that most instructors conducted assessment

haphazardly. An effective instructor always plans and strives his/ her students achieve the stated plans using a variety of active learning methods and finally evaluate their performance. To carry out the instructional process, the planned instruction should be logically related to the actual instruction and the assessments should relate to the plans and instruction (Brookhart, 1999; Keeves, 1994).

In showing the inseparable relations of the three steps (planning, method of teaching and assessment) to an effective instruction, research into quality teaching (Entwistle, 2000; Shuman, 2002; Warren Little, 2003 in Reece and Walker, 2003) also illustrated that quality teaching involves the inter play of instructional planning, a variety of active learning strategies and evaluating students' learning experiences.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	270.996	5	54.199	2.178	.058
Within Groups	4927.155	198	24.885		
Total	5198.151	203			

P> 0.05

Table-8: Summary of One Way-ANOVA: Differences of the three Universities and CTEs in applying continuous assessment

Even though, the t-test result implies a significant difference in the application of different continuous assessment techniques between Universities and CTEs, the results of one way-ANOVA implied that there was no significant difference among the three CTEs and three Universities themselves ($F_{5,198}$) =2.178, P>.05.

3.4. Conceptions on Effective Teaching

Items	Institute	N	Mean	Standard deviation	t	df	P
Conceptions on Effective Teaching	CTE	103	32.6408	5.00167	-.180	202	.857
	University	101	32.7624	4.60901			

P> 0.05

Table-9: Mean differences on the conceptions of effective teaching between Universities & CTEs (Independent Sample T-Test)

The T-Test result implied that there was no significant difference on the conceptions instructors have regarding effective teaching on institutes (between CTEs and Universities). (t= -.180, P>0.05 at df=202). That is, the mean values of CTEs (32.6408) and Universities (32.7624) regarding the conceptions of effective teaching were nearly the same.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.769	5	.954	.040	.999
Within Groups	4671.991	198	23.596		
Total	4676.760	203			

P> 0.05

Table-10: Summary of One Way-ANOVA: Differences of faculties and departments on conception of effective teaching among the three Universities and CTEs

The results of one way-ANOVA also implied that there was no significant difference among the three CTEs and three Universities ($F_{5,198}$) =.040, P>0.05. On the same vein, no significant difference was observed among different faculties and departments of the three CTEs and three Universities ($F_{5,198}$) =.813, P>0.05 regarding the conceptions of effective teaching.

Despite the fact that statistically significant difference was not observed between CTEs and Universities, the individual instructor's conceptions and understandings concerning effective teaching varied.

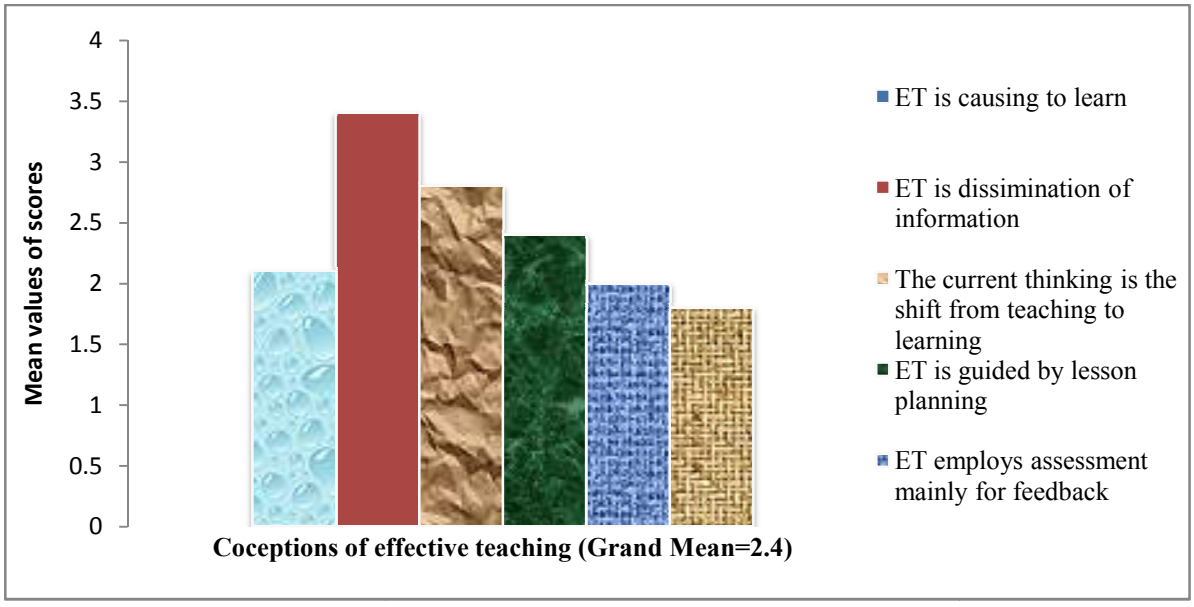


Figure- 1: A graph representing conceptions of effective teaching

From the above graph, it is clearly indicated that by the majority of instructors, the concept of effective teaching is not well addressed. Most instructors (mean value =3.4) considered effective teaching as dissimilation of information. Educators, researchers, and policymakers concur that the traditional view of learning, focused on knowledge and procedures of low cognitive challenge and the regurgitation of superficial understanding, does not meet the demands of the present and future (Danielson, 1996).

Our society today needs young people who are flexible, creative, and proactive, who can solve problems, make decisions, think critically, communicate ideas effectively and work efficiently within teams and groups. The 'knowing of knowledge' is no longer enough to succeed in the increasingly complex, fluid, and rapidly evolving world in which we live. In order to optimize life-long learning and potential success it is now widely accepted that young people need to have opportunities to develop personal capabilities and effective thinking skills as part of their well-rounded education. By using active learning methodologies it is hoped that pupils will not only come to a deeper understanding of the issues involved, but also that their motivation and enthusiasm will be heightened (Danielson, 1996; Silberman, 1996).

Besides, for an effective teaching using assessment for learning as a feedback so as to improve the teaching-learning process was found to be low. Conducting their lesson guided by the lesson plans and course plans are also found to be below the grand mean. Furthermore, most instructors (both in the universities and teacher education colleges) did not consider themselves as effective practitioners. For many teachers there is always more to do and they are always striving to find ways of doing it better - the area of effective learning and teaching is certainly no exception. Every pupil and teacher brings with them into the classroom a diversity of skills, experiences, needs and expectations. It is factors such as these which will play a large part in shaping the dynamics within the classroom.

Nevertheless, a large number of instructors understand that the current thinking is the shift from teaching to learning. In order to sustain lifelong learning, it is learners who should actively participate in the learning process and the role of the instructors is facilitating, guiding and creating conducive environment for learners. This time, there is a shift from a teacher-centered model to a learner-centered approach to learning and teaching. There is also a shift from product-driven learning to process-driven. These changes encourage teachers to reflect not only on the key principles of learning and teaching but also on their role in the process. Similarly, recent research into effective teaching to (Bransford, 1999; Lampert, 2002 in Reece and Walker, 2003) indicated that engagement with students on a personal level, excellent subject matter knowledge, demonstrating care with students and purposeful teaching is some features of effective teaching behaviors.

In an active classroom environment the role of a teacher is often that of a facilitator, supporting pupils as they learn and develop skills in, for example, assessing evidence, negotiation, making informed decisions, solving problems, working independently and working with others. Pupil participation and involvement in their learning is essential. Thus, teachers can undertake a series of reflective processes like homework and collaborative group work (Ramsdon, 1992), give clear guidance to students on what it means to work hard (Reece and Walker, 2003). Quality teaching is based on the premise that all teachers should teach well and all students should learn well.

3.5. Factors Affecting the Instruction Process

In order to analyze those factors affecting the overall implementation of the instructional process (planning,

active learning and continuous assessment), data was obtained from open ended questionnaire, interviews, and focus group discussions. Therefore, the major factors affecting the instructional process were:

- Lack of interest and commitment to conduct plans (both course plans and lesson plans) or attitudinal problems i.e most instructors believe that preparing a lesson plan is wastage of time. According to Darling-Hammond and Bransford (2005) enthusiasm, perseverance or determination affects the effectiveness of instructors in doing their work.
- Lack of knowledge in implementing different active learning strategies (mainly for those from the applied field of the universities). Teacher's general academic and verbal ability, subject matter knowledge, knowledge about teaching and learning and their teaching experience matters their effectiveness (Darling-Hammond and Bransford, 2005:15).
- Over load works of instructors (both horizontally and vertically) and large class size and shortage of time. Similarly, the teaching context matters for teacher effectiveness such as class size, school size and organization and teacher collaboration (Newmann and Wehlage, 1995).
- The block delivery of modularization approach is taken as a factor for Universities to implement continuous assessment effectively. In the same vein, Newmann and Wehlage (1995) testify that the curriculum approaches matters for their effectiveness.
- Instructors focus mainly to grading rather than improving learning by providing continuous feedback for their students;. In line with this, Collins, Brown and Holum (1991) in Darling-Hammond and Bransford (2005) stated that frequent opportunities for practice with continuous formative feedback and coaching; multiple opportunities to relate classroom work to university course work; graduated responsibility for all aspects of classroom teaching; and structured opportunities to reflect are very important for students' success.

4. Summary

4.1. Instructional Planning

Instructional planning is one of the prior tasks to be considered by instructors in higher institutions. There was a significant difference on the utilization of instructional planning between Universities and CTEs (t=8.709*, P<0.05 at df=202). That is, the mean value of CTEs (42.8155) is greater than the mean values of the Universities (37.3069). The data indicated that CTEs were found to be more effective in utilizing the instructional planning for their teaching-learning process than the Universities. In order to see the presence of significance difference among the three CTEs and three Universities in the preparation and application of instructional planning, one way ANOVA was employed and statistically significant difference was obtained ($F_{5,198}$) = 17.114, *p< 0.05).

To see the mean differences among the three CTEs and three Universities concerning the preparation and application of instructional planning, Scheffe multiple comparison test was employed. From this test of mean comparisons, Begiemeder CTE used instructional planning more than the other CTEs and Universities (44.3871) followed by Woldia CTE (42.3714) and Dessie CTE (41.9189). Whereas, Wollo University with mean values (36.75), Debere Tabor University (37) and Woldia University (38.4286) applied instructional planning less than the CTEs.

Moreover, One Way-ANOVA was also employed to see the significant differences among faculties and departments in the use of instructional planning and statistically significant difference was obtained ($F_{5,198}$) =7.224, *p< 0.05). Scheffe Multiple Comparison test indicated that most diploma program departments of the CTEs (Mathematics diploma, HPE diploma and Language diploma) have high performance in preparing the instructional planning. Professional Studies diploma and Social Science diploma were placed in the average rank. Nevertheless, almost all degree programs (Natural and Computational Science, Social Science and Humanities, and Educational and Behavioral Sciences) were found to be the lowest in preparing the instructional plans.

4.2. Active Learning

The current focus of the teaching-learning approach of higher education institutions is imparting active learning and comparisons have been made relating this issue. Regarding comparisons between CTEs and Universities in the implementation of different active learning methods, significant difference was not observed (t= -.037, P > 0.05 at df = 202). That is, the mean value of CTEs (45.3786) is nearly the same with the mean values of the Universities (45.4059). The result of one way-ANOVA also implied that there was no significant difference observed on the application of different active learning methods among instructors of the three Universities and three CTEs ($F_{5,198}$) =.012, P>.05. Similarly, the results of one way-ANOVA analysis among the different faculties of the three Universities and different departments of the three CTEs indicated that there was no significant difference observed on the application of different active learning methods ($F_{5,198}$) =.936, P>.05.

Though no significant difference was observed in the application of different active learning methods between the sample Universities and CTEs, most instructors of Universities and CTEs still are applying the traditional methods of teaching (lecture method 86 percent; question and answer method, 83 percent; demonstration, 55

percent). The most widely applied active learning method was the discussion method (83 percent). The responses of the open ended questions also revealed the same result. They revealed that "they are mostly teaching active learning through lecturing… so it is preaching rather than effective teaching".

On the other hand, those active learning methods that require higher order thinking such as problem solving (8 percent), inquiry method (11 percent), mastery learning (2.8 percent), discovery learning (3.6 percent) and the like are not applied by most instructors of both the CTEs and Universities. In addition to the knowledge gap instructors have to implement a variety of active learning methods, they itemized large class size, shortage of time, low attitude and low commitment, shortage of resources as the main impeding factors to implement various active learning methods.

4.3. Continuous Assessment

In order to improve the students' learning formative continuous assessment, that provides immediate feedback from the teachers, is important. Of course, continuous assessment doesn't mean continuous testing and one or two shot paper and pencil tests are not recommended this time. As an alternative means, continuous assessment was in place. With regard to this concept, the result of one-sample t-test analysis shows a significant difference between Universities and CTEs in the application of different continuous assessment techniques ($t=2.778^*$, $P<0.05$ at $df = 202$). That is, the mean value of CTEs (41.9369) is greater than the mean values of the Universities (40). This reveals that CTEs were found to be more effective in the application of different continuous assessment techniques than the Universities. The data obtained through interviews and focus group discussion also support the same results. A variety of continuous assessment strategies that enhances students' learning such as independent work, practical tasks, reflective activities, problem solving tasks, portfolios, demonstration performances, authentic assessments, peer and self assessment were not effectively applied.

Nevertheless, the results of one way-ANOVA implied that no significant difference was observed among the three CTEs and three Universities themselves ($F_{5,198}$)=2.178, P>.05). Unlike the results of one way ANOVA, the Means plot analysis results indicated the difference in preparing and applying continuous assessment among CTEs and Universities. As a result, the three CTEs (mainly Begiemeder, Woldia and Desssie) have the highest level of performance in applying different continuous assessment techniques. Whereas, the three Universities, namely Woldia, Debre Tabor and Wollo indicated the lowest performance in the application of different continuous assessment techniques.

4.4. Conceptions on Effective Teaching

The T-Test result implied that there was no significant difference on the conceptions regarding effective teaching between Universities and CTEs ($t= -.180$, $P>0.05$ at $df=202$). That is, the mean values of CTEs (32.6408) and Universities (32.7624) regarding the conceptions of effective teaching were nearly the same. The results of one way-ANOVA also shown that there was no significant difference on the various conceptions regarding what effective teaching mean among the three Universities and three CTEs ($F_{5,198}$) =.040, P>0.05) and among the different departments and faculties of the Universities and CTEs ($F_{5,198}$) =.813, P>0.05). From the majority of instructors' responses, the concept of effective teaching is not well addressed. Most instructors (mean value =3.4) considered effective teaching as dissemination of information.

4.5. Factors Affecting the Effectiveness of the Instructional Process

The major factors include: lack of interest and commitment to conduct plans (both course plans and lesson plans) or attitudinal problems i.e most instructors believe that preparing a lesson plan is wastage of time; lack of knowledge in implementing different active learning strategies (mainly for those from the applied field of the Universities); over load works of instructors (both horizontally and vertically) and large class size and shortage of time; the block delivery of modularization approach is taken as a factor for Universities to implement continuous assessment effectively and instructors focus mainly to grading rather than providing continuous feedback and improvement for their students.

5. Conclusions and Recommendations

5.1. Conclusions

- There was a significant difference on the utilization of instructional planning between Universities and CTEs. That is, CTEs are found to be having good experience in preparing and implementing the instructional plans than the sample Universities. There is also a mean difference among CTEs and Universities in the preparation of lesson plans. In contrast, some instructors from CTEs and Universities strongly argued that preparing a lesson plan is simply wastage of time, energy and resources and they conducted lessons without planning. Therefore it is concluded that, in most cases the stated instructional objectives that clearly shows the entry behavior of students in a given course or lesson and the desired outcomes to be assessed (assessment mechanisms used) by teachers were not congruent.
- Regarding the T-test and one Way ANOVA comparisons between CTEs and Universities in the implementation of different active learning techniques, significant difference was not observed. Though different courses, contents and activities need different active learning methods, most instructors of CTEs and Universities

still are applying the traditional methods of teaching (lecture method, 86 percent; question and answer method, 83 percent; demonstration, 55 percent). However, the most widely applied active learning method was the discussion method (83 percent). On the other hand, those active learning methods that require higher order thinking such as problem solving (8 percent), inquiry method (11 percent), mastery learning (2.8 percent), discovery learning (3.6 percent) and the like are not applied by most instructors of both Universities and CTEs. Therefore it is concluded that different active learning methods that enabled to address different contents in the way that promote creative and critical and higher order thinking were not effectively addressed by both the Universities and CTEs.

- The result of one-sample t-test analysis shows a significant difference between Universities and CTEs in the application of different continuous assessment techniques in the classroom teaching-learning process. CTEs were found to be more effective in the application of different continuous assessment techniques than the Universities. However, the results of one way-ANOVA revealed no significant difference among the three Universities and three CTEs. Only few techniques of continuous assessment such as repeated paper and pencil tests, group assignments, project works and final examinations were applied mainly for grading purpose and formative continuous assessment was not effectively implemented. Therefore, it is concluded that assessment for learning (formative continuous assessment) that promotes students' learning through providing immediate feedback was not widely applied and assessment of learning (summative continuous assessment) was widely in place.
- As the results of T-test and one way-ANOVA indicated, there was no significant difference on the conceptions regarding effective teaching between CTEs and Universities. Most instructors conceive effective teaching as disseminate information or imparting knowledge. Inconsistently, a significant amount believed that the paradigmic shift is from teaching to learning.
- Generally, there is a difference between Universities and CTEs in the application of instructional planning, methods of teaching, application of continuous assessment (formative and summative) techniques, the conception of effective teaching. There is also a wider gap in the link among instructional planning (stated objectives), application of various methods of teaching and the different continuous assessment techniques applied in congruent with the predetermined objectives.
- Different factors such as lack of interest and commitment to conduct plans or attitudinal problems (i.e most instructors believe that preparing a lesson plan is wastage of time); lack of commitment and skill or knowledge in implementing different active learning strategies (mainly for those from the applied field of the Universities); over load works (both horizontally and vertically), large class size and shortage of time; the block delivery of modularization approach to the Universities and focusing on grading purpose than improving learning by providing feedback are taken as major factors affecting the effectiveness of the instructional process.

5.2. Recommendations

- There was a significant difference on the utilization of instructional planning between CTEs and Universities. That is, CTEs are found to be having good experience in preparing and implementing the instructional plans than the sample Universities. Therefore, as Higher Education Institutions are the creators of the learned society, the instructional process should be guided by the instructional plans and the continuous assessment mechanisms should be in line with the stated objectives (entry behavior) of students set in the instructional plans.
- Significance difference was not observed between Universities and CTEs in the implementation of different active learning methods. The majority of both University and CTE instructors still are utilizing dominantly the teacher centered methods (lecture method 86 percent; question and answer method, 83 percent; demonstration, 55 percent). Those active learning methods that need higher order thinking, critical understanding and problem solving skills are not effectively implemented in the teaching-learning process. Therefore, instructors should focus on those active learning strategies that enhance higher order thinking, critical understanding and problem solving capacity, skill development and attitudinal change of students.
- Significant difference was observed between Universities and CTEs in the application of different continuous assessment techniques in the classroom teaching-learning process. The sample CTEs were found to be more effective than Universities. Though significant difference was observed, only few techniques of continuous assessment such as repeated paper and pencil tests, group assignments and final examinations were applied mainly for grading purpose and formative continuous assessment was not effectively implemented. Therefore, the concerned bodies in the Universities and CTEs should enable instructors focus on promoting students' mastery learning, skill development and attitude change by providing various modes of formative continuous assessment rather than focusing on grading purpose.
- Conceptions regarding effective teaching vary among instructors of the Higher Education Institutions. Thus, instructors should focus on teaching learning rather than imparting knowledge.
- Different factors such as lack of interest and commitment to conduct plans (both course plans and

lesson plans) or attitudinal problems i.e most instructors believe that preparing a lesson plan is wastage of time; lack of knowledge in implementing different active learning strategies (mainly for those from the applied field of the universities); over load works of instructors (both horizontally and vertically) and large class size and shortage of time; the block delivery of modularization approach to the Universities and focusing on grading purpose than feedback are taken as major factors affecting the effectiveness of the instructional process. Therefore, due emphasis should be given by all the concerned in order to tackle those hampering factors and capacity building on-job trainings up on the instructional processes (instructional planning, active learning and continuous assessment) and the interplay of the three elements should be provided in a more sensible manner.

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References

Austin, A.W. (1993). *Assessment for Excellence. The Philosophy and Practice of Assessment and Evaluation*. New York: Macmillan.

Austin Independent School District.(2010). *Planning for Rigor.* Department of Language Arts.

Black P, Wiliam D (1998). Assessment and Classroom Learning. Assessment in Education, March, 1998, pp. 7-74.

Bonwell, C. C., & Eison, J. A. (1991). *Active learning: Creating Excitement in the Classroom* (ASHE ERIC Higher Education Report No. 1). Washington, DC: Association for the Study of Higher Education.

Borich, G. D. (1988). *Effective Teaching Methods*. Columbus: Merrill Publishing Company.

Brookhart, P.(1999). The Role of Assessment in Instruction. Jones and Bartlett publishers.

Brown, S. & Knight, P. (1994). *Assessing Learners in Higher Education*. London, UK: Kogan Page.

Danielson, Charlotte (2007). Enhancing Professional Practice. A Frame work for Teaching. (2nd ed.). Association for Supervision and Curriculum (ASCD). Alexandria: Virginia.

Darling-Hammond, L. (2006). Constructing 21st Century Teacher Education. *Journal of Teacher Education*, *57*(3), 300-314.

Danielson, C. (1996). *Enhancing Professional Practice*. A Frame work for Teaching.(1st ed.). Virginia: Association for Supervision and Curriculum Development. USA. Virginia.

Darling-Hammond, L and Bransford, J (2005).(Eds.) Preparing Teachers for a Changing World: what Teachers should Learn and be able to do.USA: Jossy-Bass Education Series.

Dawit Mekonnen. (2008). Prospective and In-service Teachers' Thinking about Teaching and Learning: A Metaphorical analysis. *In the Ethiopian Journal of Education*, 28(1):49-72.

Education and Training Policy (1994). Federal Democratic Republic of Ethiopia: Addis Ababa.

Entwistle, N. (1994). Adult Study Strategies. In T. Hussen and T.N. Postlethwaite (Eds.), *The International Encyclopedia of Education* (pp.184-194). London: Pergamon.

Entwistle, N. J. & Entwistle, A. (1991) Contrasting forms of Understanding for Degree Examinations: The Student Experience and its Implications, *Higher Education, 22*,205–227.

Frazee, et al. (1995). *Integrated Teaching Methods: Theory, Classroom Application, and Field-Based Connections*.

Johnson, D. W., Johnson, R. T., & Smith, K. (1991). *Cooperative Learning: Increasing College Faculty Instructional Productivity* (ASHE-ERIC Higher Education Report No. 4). Washington, DC: Association for the Study of Higher Education.

Keeves,J.P. (1994). Assessment in Schools: Methods of. In T. Husen and T.N. Postlethwaite (Eds.), *The International Encyclopedia of Education* (pp362-370). London: Pergamon.

Leinhardt, G. (1983, April). *Routines in Expert Math Teachers' Thoughts and Actions.* Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada. (ERIC Document Reproduction Service No. ED234980)

Livingston, C., & Borko, H. (1990). High school mathematics review lesson: Expert-novice distinctions. *Journal for Research in Mathematics Education*, *21*, 372–387.

Livingstone, G.(2001). *Taking Teacher Education Forward: Ten Steps towards Quality a Report*. MoE, Addis Ababa.

Meyers, C., & Jones, T. (1993). *Promoting Active Learning: Strategies for the College Classroom.* San Francisco: Jossey-Bass.

Newman, F.M., and Wehlange, G.G.(1995). Successful School Restructuring. Madison: University of Wisconsin.

Perkins, D. N. (1992). *Smart Schools: Better Thinking and Learning for Every Child.* New York: The Free Press.

Ramsden,P.(1992). *Learning to Teach in Higher Education*. London: Rutledge and Falmer.

Reda Darge (2001) Conceptions of Constructivist Teaching Approaches in Higher Education: A Case study. *Institute of Educational Research (IER)*. 9(1):57-94

Reece, I. and Walker, S. (2003). *Teaching, Training and Learning*: A Practical Guide Incorporating FENTO Standards (5th ed.). Business Education Limited Publishers.

Shulman, L. S. (1987). Knowledge and Teaching: Foundations of the New Reform. *Harvard Educational Review, 57(1), 1–22.*

Silberman, M. (1996). *Active Learning: 101 Strategies to Teach any Subject.* Boston: Allyn and Bacon.

Singh, R.R. (2006). *Measurement and Evaluation in Education*. New Delhi: Shree publishers and Distributors.

Struyven,K., Dochy,F. and Janssens, J. (2005). Students' Perceptions about Evaluation and Assessment in Higher Education: A Review. *Assessment and Evaluation in Higher Education*, 30 (4), 331–347

Sokoloff, D. R., & Thornton, R. K. (1997). Using Interactive Lecture Demonstrations to Create an Active Learning Environment. *The Physics Teacher, 35,* 340-347.

UNESCO (2006). Cross-Cultural Studies of the Quality of Education: Planning their Design and Managing their Impact. UNESCO: International Institute for Education al Planning. Available at www.unesco.org/iiep

USID/IQPEP.(2010). Teachers Handbook on Formative Continuous Assessment. Grade Four. Addis Ababa: Commercial Printing Enterprise.

Wlodkowski, R. J.,& Ginsberg, M. B. (1995). *Diversity and Motivation: Culturally Responsive Teaching*. San Francisco: Jossey-Bass.

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