

Determining the impact of Higher Diploma Program on the education Quality: The case of Ethiopian institute of Textile and Fashion Technology (EiTEX)

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Abstract: The objective of this study was to Determining the impact of Being thought by Higher Diploma Program trained teacher and Non Higher Diploma Program(HdP) trained teacher on the education Quality. The result indicate that HdP trained teachers have improve the education quality than that of non HdP trained teacher [8, 10]. Multiple instruments with multiple sources were used in data collection in the following order: Questionnaire, classroom observation, and Focused group discussion. On this research qualitative and quantitative data gathering methods and analysis were used. The participants of the study were 331 students from different department and different batch, 20 HDP trained and 20 non-HDP trained teachers. The results indicate that HDP trained teachers were found to be better impact on improving education quality than that of non HDP trained ones. Besides, independent sample t-test and chi square were used. The data gathered through qualitative methods was Large class size, classroom arrangement, lack of resources, and students' passive involvement were mentioned as major challenges to the implementation of a range of active learning methods ad assessment techniques. Thus, the university should strengthen the HDP training to promote Education quality.

Keywords: Impact, qualitative, active learning methods, Quality.

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1. Introduction

A recent development in the national education system of Ethiopia since 1991 can be characterized by policy promises to effect major changes in the system. In 1994, the Ethiopian education and training policy was issued and a pledge/initiate was made to ensure four educational goals: Quality, access, relevance and equity [9] and [17]. The EiTEX has launched the Higher Diploma Programme as one of the major components for bringing about quality education. To this end, the institute's Education Quality Assurance and enhancement, the Capacity building and the Higher Diploma Candidates are investing a lot of their time, effort and resources for the overall success of the programme.

Hence, assessing the outcomes of this programme on the instructional practice of instructors has a paramount importance in order to improve its way of delivery to the better, and to realize its objectives on the ground. However, the practical implementation of the principles HDP graduates have acquired from the HDP training have not yet been studied in their real classroom settings. The rationales set to validate the need for reform are the following: ... it is known that our country's education is intertwined with complex problems of relevance, quality, accessibility and equity. The objectives of education do not take aware of the society's needs and do not tolerably indicate future direction. The absence of interrelated contents and mode of presentation that can develop students' knowledge, cognitive abilities and behavioral change by level, to adequately

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enrich problem-solving ability and attitude, are some of the major problems of our education system [9].

The absence of interrelated contents and mode of presentation that can develop student's knowledge, cognitive ability and behavioral change by level, to adequately enrich problem solving ability and attitude, are some of the major problems of our education system [13]. The first action taken by Teacher Education System Overhaul (TESO) was designing curriculum material in modular approach Developing the culture of active learning and problem-solving approach of instruction [15]. To this end, the training of HDP comprises the following major teams: reflective educator, time management, active learning methods, continuous assessment, and action research which increase the education quality [3]. Ease of learning a subject and sustaining it for future use to solve any problems that arise in our interaction with the environment is the most applaud benefit of learner centred methods of teaching [10]. This is because, according to Ahmed (2013), active learning draws upon the concept of experiential learning where knowledge is constructed through the transformation of experience [1].

Since the HDP program is launched by Ministry of Education as a national agenda across all universities in Ethiopia, the study will indicate how much the program is successful in its implementation, particularly in the EiTEX. It will be used as a baseline for planning and implementing teacher development tasks by ministry of education and universities. The study will be used as a means to confirm the efforts being made by teachers to ensure quality of education in the EiTEX. It will be used as a standing point for further implementation and impact studies focusing on the similar issues. The study will indicate the challenges that hinder education quality pillars such as: Active learning, continuous assessment, reflective practice [10].

2. Review of Related Literatures

The Scholars in the field of teaching defined reflective teaching from different perspectives. Dewey defines reflective practice as an active, persistent, and careful consideration of any belief or supposed form of knowledge in the light or the grounds that support it, and the further conclusions to which it tends [8]. From Dewey's perspective, when teachers are confronted with situations, they should act either in routine or reflective ways. At one extreme, there are teachers who only follow set routines based on tradition, habit, institutional norms and expectations which have impact on education quality [9, 10, 17]. There is agreement among scholars about the importance of the teacher and competence in the teaching-learning process. The teacher is the heart of classroom instruction [5]. The effectiveness of the teacher depends on their competence (academically and pedagogically) and efficiency, (ability, work load, and commitment), teaching and learning resources and methods; support from education managers and supervisors [14]. Reflection is widely accepted as important for teachers' professional development. Many studies have been carried out to study both experienced and novice teachers' reflection in their teaching practice, and different frameworks are developed to serve various research agenda [12].

Most importantly, self-reflection of once practice as a measure of improving the quality of teaching and learning will be helpful. This is based on the assumption that the more teachers make their classrooms and their teaching practices open to peer observation and assessment, the better the lesson they obtain to improve their practice and thus, improved student learning. This can be more consolidated when a teacher is ready to engage in a continuous professional reflection on his/her own practice [19]. Active learning includes all the components of the instructional process where students do something to realize the goals of learning. When students learn with the help of active learning strategies, they are not simply learning subject matters but they apply concepts and explore relationships between concepts, facts and contrasting points of views coming from different socio-cultural settings [5].

Elaborating this point, American Psychological Association, stated that the learning of complex subject matters is most effective when learning is an internal process of constructing meaning from information and experience. As compared to the traditional lecture based approach in which students are passive recipients of information, active learning strategies

emphasize constructivist qualities such as independent inquiry and the structuring and restructuring of knowledge [13]. Assessment can be defined as the process of gathering the data and fashioning them into interpretable form for decision-making. It involves collecting data with a view to making value judgment about the quality of a person, object, group or event. Educational assessment is vital in teaching and learning process [2].

2.1. Method of Data Analysis

Both quantitative and qualitative methods of data analysis were used to analyze the data. In the quantitative analysis, statistical techniques of percentage, frequency count, mean and standard deviation were employed. In addition, independent sample t-test and chi square will be used to identify group variations. The qualitative data was analyzed on thematic basis considering the research questions. Based on such analysis, the results was summarized and conclusions was made.

3. Data Analysis and Interpretation

- In this section, the data obtained was analyzed and interpreted.
- The data presentation is categorized as demographic variables(education quality pillars), teachers as reflective practitioners, implementation of active learning methods and continuous assessment.

4. Demographic Profile of Participants

Variable	Sex of Respondents					
	Female		Male		Total	
	N	Percentage	N	Percentage	N	Percentage
Instructors who are HdP trained	6	17.65	28	82.35	34	100
Instructors who are HdP trained	9	45	11	55	20	100
Total	17	31.46	37	68.52	54	100
Education status BA/BSc	4	66.67	2	33.33	6	11.11
Education status MA/MSc	13	27.06	35	72.92	48	88.89
Total	17	31.46	37	68.52	54	100
Apparel Production Research and Innovation Center	6	40	9	60	15	27.78
Basic science and engineering Research and Innovation Center	2	16.67	10	83.33	12	22.22
Textile Chemistry Research and Innovation Center	3	30	7	70	10	18.52
Textile production Research and Innovation Center	6	55.29	11	64.71	17	31.48
Total	17	31.48	37	68.52	54	100

Table 1: Demographic Characteristics of teachers

As it is presented in Table 1 above, among HDP-trained instructors, most of the participants (82.35) were male instructors, where as few participants (17.65) were females. Regarding educational status of the respondents, majority (88.89) were second degree (master) holders. The rest (11.11) was first degree (BA/BSc) holders. Furthermore, more than 54 of the respondents were taken from the four RiC i.e. AP (27.78), BES (22.22),TP(31.48), and TC (18.52).

variable	Sex of Respondent				Total	
	Female		Male			
	N	Percentage	N	Percentage		
Students being Taught by HdP Trained Teacher	98	47.12	110	52.88	208	100
Students being Taught by Non HdP Trained Teacher	43	34.96	80	38.46	123	100
Total	141	42.6	190	57.4	331	100
Sex of Respondents across Textile engineering program	39	34.82	73	65.18	112	33.8
Sex of Respondents across Garment engineering program	34	49.27	35	50.72	69	20.8
Sex of Respondents across Leather engineering program	26	41.93	36	58.07	62	18.7
Sex of Respondents across Fashion Design program	27	61.36	17	38.64	44	13.3
Sex of Respondents across Textile and Apparel Merchandising program	12	33.33	24	66.67	36	10.8
Sex of Respondents across TVET program	3	37.5	5	62.5	8	2.42
Total	141	42.6	190	57.4	331	100

Table 2: Demographic Characteristics of students

As indicated in the above, although the total number of students who were being taught by HDP trained and non-HDP trained instructors and the distribution of female and male of HDP trained and non- HDP trained was different. Majority of the participants (among the total) 190 (57.4) are males; while 141 (42.6) are females. There were 112 students from TED, among which the number of female students (39) was lower than that of male students (73).

5. Reflective Practice

Variable	Category	N	Mean	Standard deviation	df	t	sign
Reflective	HdP Trained Teacher	20	45.85	5.45		2.0158	
Reflective	Non HdP Trained Teacher	20	41.20	8.25	38		0.043

Table 3: Results of independent sample t-test on Reflective practices by teachers

As can be seen in the table above, HDP trained teachers were found to be better in reflective practitioners than the non HDP trained ones. Hence HDP trained teachers were found to be better in improving education quality than the non HDP trained ones [10].

6. Active Learning Methods

Variable	Category	N	Mean	Standard Deviation	df	t	sign
Active Learning	HdP trained	20	28.12	5.75		4.01	
Active Learning	Non HdP trained	20	26.45	6.35	38		0.006

Table 4: Results of independent sample t-test on active learning methods by teachers

On the use of active learning methods result implies that on the implementation of active learning methods, teachers who had access for the HDP training frequently use a range of active leaning methods than those who hadn't.

7. Attitude to Ward Using Active Learning Method

Variable	Category	N	Mean	Std. Deviation	df	t	sign
Attitude	Trained	20	23.94	5.737			
Attitude	Non trained	20	22.87	5.284	38	-1.56	0.075

Table 5: Results of independent sample t-test on teachers attitude towards active learning methods

The above table, it was found to be statistically insignificant regarding the attitude of HDP trained and untrained teachers towards active learning methods. Such minor differences could be seen from the point of view that regardless of whether teachers got knowledge on active learning methods or not, their attitude towards ALMs remains the same. This, in turn, entails us that most teachers of EiTEX have positive attitude towards ALMs though they found it difficult to implement them in their respective classes.

8. Students Observation on Teachers use of Active Learning Methods

Variable	Category	N	Mean	Std. Deviation	df	t	sign
Practice of active learning methods	Trained	43	20.75	5.23			
Practice of active learning methods	Non trained	43	16.35	6.87	84	1.519	0.045

Table 6: Results of students observation on teachers use of active learning methods

As indicated that students did observe differences in the use of active learning methods between trained and non trained teachers.

9. Use of Assessment Techniques by Student

Assessment	HDP training	N	Mean	Std. Deviation	df	t	sign
Knowledge	Trained	100	36.75	3.85	198		.009
Knowledge	Non-trained	100	23.53	3.966	198	4.904	
Attitude	Trained	100	19.25	3.35			.128
Attitude	Non-trained	100	18.45	4.20	198	1.466	
Practice	Trained	100	23.35	3.85			.063
Practice	Non-trained	100	22.25	5.25	198	1.775	

Table 7: Results of independent sample t-test on knowledge, attitude and practice of assessment techniques between HDP trained and non-HDP trained teachers by student.

As shown in the above table, the independent sample t-test result has also showed statistically insignificant mean difference between the two groups. Regarding the practice of variety of assessment techniques, result of the independent sample t-test also indicated statistically insignificant variation between trained and non-trained teachers.

10. Use of Assessment Techniques by Female Students

Assessment	HDP training	N	Mean	Std. Deviation	df	t	sign
Knowledge	Trained	43	32.56	2.05			.023
Knowledge	Non-trained	43	21.24	4.44	84	3.38	
Attitude	Trained	43	21.89	2.58			.153
Attitude	Non-trained	43	20.74	3.02	84	1.45	
Practice	Trained	43	19.31	3.67			.0425
Practice	Non-trained	43	15.35	5.36	84	2.04	

Table 8: Results of independent sample t-test on knowledge, attitude and practice of assessment techniques between HDP trained and non-HDP trained teachers by female student

As shown in the above table, the result of independent sample t-test also indicated statistically significant difference between the mean of HDP trained and non trained teachers. On the other hand, the mean of teachers' attitude towards the use of variety of assessment techniques was found to be similar between the HDP trained and non HDP trained teachers. In this regard, the t-test result has also showed statistically insignificant ($t = 1.45$, $df = 84$, $p > 0.05$) mean difference between the two groups. Regarding the practice of variety of assessment techniques, the mean of HDP trained higher than that of non HDP trained. The result of the independent sample t-test also indicated statistically significant difference between the mean of HDP trained and non HdP trained teachers.

11. Students' Observation on Teachers use of Active Learning Methods

students' observation on teachers' use of ALMs	HDP training	N	Mean	Std. Deviation	df	t	sign
Textile Engineering	Trained	39	28.35	2.65		2.34	.019
Textile Engineering	Non trained	73	21.26	4.25			
Garment Engineering	Trained	35	21.58	3.21	67	1.586	.0489
Garment Engineering	Non trained	34	18.59	4.52			
Leather Engineering	Trained	36	24.32	2.54	60	2.014	.0432
Leather Engineering	Non trained	26	21.48	4.32			
Textile and Apperal Merchandizing	Trained	24	19.23	3.24	34	3.28	.008
Textile and Apperal Merchandizing	Non trained	12	16.48	4.87			
Fashion Design	Trained	17	19.25	3.35	32	4.012	.0154
Fashion Design	Non trained	17	18.45	4.20			
TVET	Trained	3	14.32	3.85	4	1.775	.063
TVET	Non trained	3	11.34	5.25			

Table 9: Results of students' observation on teachers use of active learning methods

Assessment	HDP training	N	Mean	Std. Deviation	df	t	sign
Assessment techniques	Students taught by HDP trained teachers	100	32.35	6.95	198		0.065
Assessment techniques	Students taught by non HDP trained teachers	100	31.75	7.12		-1.56	

Table 10: Results of independent sample t-test on students? response on assessment techniques

According to the table above, it was found to be statistically insignificant with respect to the implementation of assessment techniques of HDP trained and untrained teachers. Such minimal differences could be attributed to the fact that students

might considered that the questionnaire was to evaluate their teachers' performance and they liked to appear very positive to their instructors.

12. Results of Focus Group Discussion

The results of focus group discussion (FGD) were analyzed thematically as raised in the objectives and the research questions.

12.1. Active Learning Methods

HDP trained teachers responded that active learning method has a paramount benefit to students in developing self-confidence, self-reliance, sharing of ideas and experiences so that their communication skills have been reasonably improved. Moreover, respondents underlined that active learning methods helped students in retaining knowledge and skills in a more complete and practical manner. They went on saying that active learning methods are helpful in addressing the learning needs and/or preferences of all kinds of learners in an enjoyable way.

Moreover, implementing active learning methods in instructional setting has also a number of advantages to the instructors. To begin with, according to the respondents, active learning methods have helped them to make their classes and/or lessons more socially inclusive; students of different learning styles (i.e. visual, auditory, kinesthetic) have been benefited from the lessons delivered through active learning techniques. Besides, the instructors claimed that active learning methods promote their continuous assessment in order to see how well the students are progressing with the lesson/s. They also reflected that they were able to evaluate their own professional practices and their colleagues' practices. In other words, the instructors' reflective behavior has been improved. Data gathered from non HDP trained instructors regarding active learning methods revealed that in principle, they believed that active learning methods are more effective than traditional lecture method in terms of helping students learn better. They agreed that active learning methods avoid students' dependence on their teachers; learners can develop the habit of learning by doing and learning from each other.

They can also foster their confidence, public speech and social interaction skills. Diversity of ideas, feeling and knowledge can be obtained if all the learners are engaged in the discussions. They further explained that it is also helpful for teachers to cover lengthy courses within a short time. Most participants of the discussion, therefore, claimed that they make an endeavor to use active learning methods with respect to the differing realities of the courses they offer. In addition, participants from college of medicine and faculty of veterinary reported that they use laboratory experiment, demonstration and field report in their lessons. Some respondents underlined that even if a certain active learning method has already been prescribed in the syllabus, it is vital to be flexible according to the existing situations of the classroom and the feelings of the learners. FGD was also conducted with students who were taught by HDP trained and non trained teachers. Students reported that their teachers employ a range of different active learning methods in their respective classes. Though students admitted that there are difference active learning methods used by each HDP trained teacher, question and answer, presentation, role play, debate, reflection, brainstorming and peer discussion were the most frequently used ALMs. Data was gathered from students who were taught by non HDP trained teachers through FGD. According to the participants of the FGD, some of the teachers use active learning methods. However, these teachers were teaching skill courses which by their very nature require the active engagement of learners.

From the responses of the participants, it was understood that, the nature of the courses tend to affect teachers' implementation of active learning methods. The most frequently used methods were group work, pair work and question and answer. As the participants were from different departments, the researchers concluded that the types of Active Learning Methods used were not sufficient; methodologists agree that any lesson, whether it is more of theoretical like history or practical such

as language lessons, can be delivered through active learning methods.

It all depends on the teacher's ability to plan the lesson some time ahead of the class. Students reported that their teachers were not effectively using active learning methods due to several reasons. Some of which include large class size, students' lack of interest and responsibility, poor educational background, time shortage (a case in point is modular syllabus) and teachers' lack of classroom management skill. Data from the participants indicated that most teachers were not using varieties of relevant teaching aids except handouts. It's believed that teachers in higher education need to be resourceful and support their classroom instructions with relevant and adequate supplementary inputs so that students can enrich their knowledge of the course.

12.2. Use of Assessment Techniques

The FGD data collected from students taught by HDP trained teachers indicated that majority of their teachers use variety of assessment techniques as forms of continuous assessment. Teachers use questioning and answering, quizzes, tests, reading assignments, pair work, group work, individual and group presentations as a form of formative assessments. Moreover, question and answering, reading assignments and group presentation after class discussions were taken as a ways of identifying students understanding of the concept. Students also indicated that tests and quizzes are frequently used by teachers. In addition, teachers prepare questions for students to discuss in the class then teachers provide feedback to improve students' learning. On the other hand, data obtained from students taught by non HDP trained teachers showed that only some of their teachers conducted continuous assessments, and these assessment techniques were limited in their type.

The most common ones are presentation, test, group work and reading assignment. This entails us that many of the teachers did not assess their students' progress continuously. This indicated that students' everyday learning progress was not assessed and the instructional gaps left unidentified. HDP trained teachers have knowledge on how to assess their students continuously to improve their students learning. They use range of assessment techniques like peer assessment, group assessment, project works, observation, assignments, presentation in addition to test and quizzes.

The FGD also showed that the HDP training helped them in planning their sessions before class and in assessing their students continuously for formative purposes. According to the discussion made with non HDP trained teachers, they appear to be unaware of formative assessment techniques. All of them reported that they offer quizzes, tests and exams somewhere in the middle or at the end of each unit as part of continuous assessment. They make an Endeavour to participate all the members of the group by randomly asking members to present the assignment and including test items from the assignments given. They believed that tests and assignments that won't be part of students' grades will discourage the learners and hence every assessment has to be graded. However, one of the instructors said that he gets students to briefly summarize the previous lesson before he begins a new lesson. Such assessment techniques may take the first five minutes of the session and usually few students participate/involved. It was also understood that many of the participants were not familiar with self, peer and group assessment techniques.

12.3. Results of the Classroom Observation

Variable	Observation score	Non HDP trained		HDP trained		Chi square	Phi
		N	Per	N	Per		
Teachers	̄6	20	86.96	3	13.04	29.75	0.0001
activities	̄6	3	13.04	20	86.96		
Students	̄5	21	77.78	6	22.22	15.35	0.002
activities	̄5	2	8.70	17	73.91		
Total		23	100	23	100		

Table 11: Chi square results on classroom observation

As the above table indicated, for teacher activities, the average score to determine average point was 6. The result showed that from 21 observations, 20(86.96 per) of the non HDP teachers found to have below the average score while there was no HDP trained teachers whose score is below the average. In the teacher's activities, only 3(13.04 per) of the non HDP trained teachers were found to perform above average. Similarly, the chi square result also indicated that there is a statistically significant, $\chi^2(1, N=20) = 29.75$, $p < .05$, association between the observation results and being HDP trained and non HDP trained teacher. Regarding students' activities in the classroom, 21(77.78 per) of classes who were taught by non HDP trained teachers were found to have below average performances in their class while only 6(22.22 per) observation on classes taught by HDP trained teachers were found to have lower students engagement. On the other hand, students who were taught by HDP trained teachers have below average engagement in their class constituted 6(22.22 per). In classes taught by HDP trained teachers, 15(71.4 per) of the observation results indicated above average engagements of students in their learning. Likewise, the chi square results indicated a statistically significant $\chi^2(1, N=21) = 16.70$, $p < .05$ association between HDP trained and untrained in engaging students in the process of their learning.

13. Challenges of Implementing Active Learning Methods and Assessment Techniques

Teachers were asked to list the challenges they face in implementing active learning methods. Both HDP trained and non trained teachers do believe that there appear to be opportunities of utilizing active learning methods in the university. However, in reality, there are also discouraging challenges arising from different sources. They identified several challenges related to students, the nature of courses, teachers themselves, and the university at large; all of which hampering the use of active learning methods in various ways. Teachers strongly mention the following as challenges.

- Large class size (number of students exceeding 50 in a single classroom)
- Students' resistance-students feel that they are doing the task of the teacher
- Lack of willingness in the part of students in taking responsibilities for their own learning.
- Students' poor academic background problems- since active learning requires students' ability to carry out tasks, students fail to do so because of their poor background knowledge and experience.
- Most importantly, students' lack of interest, passivism and poor background knowledge were found to be the fundamental threats for effective implementation of active learning methods.

- Similarly, learners usually complain about the burden of assignments and shortage of time. It was also reported that some courses like practical courses lend themselves for active learning methods and other theoretical ones are not easily delivered through such methods.
- Assignments in groups are done by only few or a single student;
- Language barrier to communicate as students come from different language backgrounds; and Shyness and lack of English language proficiency.
- Students perform poorly at the maximum effort of teachers;
- Poor presentation of students (as a result, teachers decrease the number of planned presentation schedules);
- Students' inability to prepare and follow directions for reading assignments; and Students unable to communicate well with their teachers.

14. Discussion

14.1. Teachers as Reflective Practitioners

The results of this research indicated that most of the HDP trained teachers responded agree and strongly agree to almost all items of the reflective practitioner and teachers have developed the experience of identifying their limitations and strengths for improving the teaching learning process. This indicates that the training helped these teachers to be more reflective than their untrained colleagues with respect to their professional practices. The result implies that teachers have developed the experience of identifying their limitations and strengths for improving the teaching learning process. reflective teaching practice is a continuous process and involves learners thoughtfully considering their own experience in applying knowledge to practice while being taught by professionals [16]. It is believed that the reflective educators take actions upon their focused thoughts about the professional practices; they do not continue in a course of action that they have realized is not working effectively. It is also seen that teaching takes place in a social setting that has its own unique characteristics, opportunities and constraints. In other words, it can be inferred that their reflective behavior has been improved compared to their non trained counter parts. In this regard, Rayford (2010) found that teachers who undergo with intensive teaching methodology trainings believed reflection was important and worthwhile. He further pointed out that teachers liked reflecting about their own teaching [14].

In this study, the HDP trained teachers, unlike their non-trained staffs, indicated high practice of getting feedback from their students and colleagues for personal development which improve the education quality [10]. The purpose of reflection is to actively engage in the thinking process to gain a deeper understanding of one's actions for future improvements/improve education quality. According to (Ontario Principals Council 2009), teachers develop their instructional practice best when reflection is job-embedded and there is a process in place to assess their practice. Reflection on assessment allows educators to constantly be aware of the impact of their practice on student learning and performance [7]. The reflective educator recognizes the inherent differences in his classes (when he has more than one group of students) and does not treat all classes the same by teaching exactly the same lesson.

14.2. Active Learning Methods

Practice of active learning methods in the classroom: The data revealed out that t-test result depicts that the difference between two groups was statistically significant, that is, on the practice of active learning methods, teachers

who had access for the HDP training frequently use a range of active learning methods than those who had not. Data obtained from FGD Results of on both HDP trained and non HDP trained teachers also implied a similar understanding in this respect. Which means, the participants who have taken HDP training were able to list more types of active learning techniques they frequently used in their classes with detail explanations, while that of the non trained teachers were able to list very limited techniques of active learning with general knowledge. That is, in principle, the participants (the non HDP trained teachers) believed that active learning methods are more effective compared to the traditional lecture method in terms of helping students learn better.

They agree that active learning methods avoid students' dependence on their teachers; learners can develop the habit of learning by doing and learning from each other. Most participants of the discussion, therefore, claimed that they make an endeavour to use active learning methods with respect to the differing realities of the courses they offer. However, the researchers understood from the discussion that the target teachers did not seem to use verities of these methods in practice. From the discussion, it was evident that limited active learning methods such as brainstorming, group work, presentations, and question and answer were the most common methods used by almost all the participants. In addition, participants from college of medicine and faculty of veterinary reported that they use laboratory experiment, demonstration and field report in their lessons. Some respondents underlined that even if a certain active learning methods have already been prescribed in the syllabus, it is vital to be flexible according to the existing situations of the classroom and the feelings of the learners. Furthermore, the results of FGD of both students who were taught by HDP trained and non HDP trained teachers stated as follows: the response of students who were taught by HDP trained teachers can be summarized as such, in most cases, the teachers, revise the previous classes, give brainstorming questions, and facilitate the peer and the group discussion, made the students present, give feedback and explain things clearly. They usually used techniques such as Question and answer, Presentation, Role play, Debate, Reflection, Brainstorming, and Peer discussion. Moreover, they give room for students to ask for the unclear, then explain over students' questions, summarize the day's lesson; the summary may include delivery of quiz by the teachers, and finally the teachers usually give soft or hard copy of materials or inform references or different websites to students to be read to the next classes.

Therefore, from the details, the researchers were able to conclude that the HDP trained teachers practice active learning methods in their classes. Whereas, from the response of students who were taught by non HDP trained teachers, it was understood that even if students reacted that their teachers use active learning methods, these methods were very limited in type. The most frequently used methods were group work, pair work and question and answer. As the participants were from different departments, the researchers concluded that the types of Active Learning Methods used were not sufficient; methodologists agree that any lesson, whether it is more of theoretical like history or practical such as language lessons, can be delivered through active learning methods. It all depends on the teacher's ability to plan the lesson some time ahead of the class. Thus, it is hardly possible to generalize that all teachers (non HDP trained teachers) use active learning methods. Thus, the study findings showed that HDP training is enhancing the endeavour of the university to render quality education and make itself align to the expectation of higher education. In this respect, globally, education has shown a paradigm shift from teacher-centered to student-centered way of delivery of education. In other words, students are made to take more responsibilities for their own learning by themselves through the application of ALMS by teachers. Supporting this idea, Barr and Tagg (1995) stated that for well over a decade, the focus of the University classroom has steadily shifted from a teacher-centred approach to a learner-centred approach [4]. This shift calls for a rethinking of the traditional classroom, replacing the standard lecture with a blend of pedagogical approaches that more regularly involve the student in the learning process.

14.3. Teachers Attitude towards ALMS

The fact that both HDP trainee and non HDP trainee teachers have positive attitude towards ALMS is encouraging and in line with the current paradigm of education of the world i.e. student-centred teaching-learning. Among other things, quality education can be ascertained when teachers practice active learning methods in the teaching learning process. In this regard therefore, the EiTEX is said to be in safest position that its teachers have a kind of attitude. Nevertheless, the fact that non HDP trainee teachers are having positive attitude towards ALMS is attention seeking and worth of moving the discussion a bit further. To have full practice of ALMs by all teachers of the University at all levels of departments, schools, faculties, Institute and colleges, it sends a message that HDP training should continue in the EiTEX.

14.4. Implementation of Assessment Strategies

Instructors' Knowledge about Assessment: Most HDP trained teachers were found to have enough knowledge about assessment. This confirms that majority of the instructors used variety of assessment techniques throughout their instructions. This, in turn, promotes the students learning. In line with this, Shepard (2008) states that assessment is carried out during the instructional process for the purpose of improving teaching or learning [21]. What makes formative assessment formative is that it is immediately used to make adjustments so as to form new learning. They asserted that they frequently use tests, quizzes, and exams. Their knowledge about continuous assessment is limited to continuous tests and quizzes. This influences their assessment strategies. Having in mind that assessment does have an influence on learning, the knowledge EiTEX instructors acquired through the HDP training about assessment led to students retaining their learning. This provides the learners with feedback on their progress by helping them to be more self critical and understand and apply concepts as they arise. Sadler (1998) explains that formative assessment is specifically intended to provide feedback on performance to improve and accelerate learning [15].

Similar result was obtained from the FGD that HDP trained instructors have acquired enough knowledge on assessment where as untrained teachers don't have sufficient know-how about assessment. This entails us that teachers who have not enough knowledge about assessment wouldn't use appropriate assessment techniques; thus, don't make the right decision on their students' learning.

Instructors' Attitude towards Assessment: The results indicated higher mean implying teachers have a positive outlook towards the use and importance of using assessments despite HDP training. Tangdhanakanond and Wongwanich (2012) also indicated that teachers have positive attitude towards using assessment techniques to improve their students' learning through for example portfolio assessment. This study was also supported by Kitiashvili (2014) indicating teacher positive attitude in using different methods assessment [11, 18]. Teachers believed that their assessment techniques are fair enough to their students, make differences among students, improve students' performance, help teachers in amending their teaching strategies, and are linked to the objectives set on the courses they are teaching. In contrast, Watt (2005) found negative attitude of teachers towards the use of variety of assessment and are satisfied with the traditional assessment strategies without differences in background of teachers except teaching experiences [20].

The difference obtained from independent sample t-test regarding the attitude of HDP trained and non HDP trained teachers towards assessment was found to be statistically insignificant. This implies both trained and non trained teachers showed no difference in their attitude towards the use of assessment techniques. On the contrary, the results of FGD with teachers with and without HDP training has significance while they explain their view towards the use of assessment strategies especially regarding use of formative assessments. Non HDP trained teachers mostly explain the use of assessment in terms of using it to grade their students thinking that assessing their progress without grading may discourage students to work hard.

Practice of Assessment among Instructors: The data gathered from all programs of the EiTEX, assessment techniques are being implemented regardless of the HDP training. Although it is believed that teachers who have knowledge on a certain issue practice their knowledge better than those who don't have, in this research there is lack of correspondence between knowledge of assessment and practice. That means there is no any significant difference between HDP trained teachers and non trained ones. However, the results of the FGD and the observation revealed out that teachers who had HDP training put in to practice the knowledge and skills they acquired about assessment in a much better way than those teachers who didn't receive HDP training. Some of the positive impacts of using a range of assessment methods include students remained active during the entire instruction, they created a link between what they have previously learned with the new lessons to be treated, students took responsibility for their own learning, and they develop critical thinking and problem solving skills. Using a range of assessment techniques shifted the instructors' role from teaching to focusing on assessment for learning and improving students' higher order thinking skills through the process of coaching for learning.

The implementation of a range of assessment methods with appropriate feedback helps both teachers and students involve in the process of assessment for learning. For example, effective feedback helps instructors reflect on what they do well and identify how to make changes to enable them to do things even better. Research conducted on assessment has shown that high quality feedback to learners makes a vital contribution to learning. In relation to this, Pollard (2008) states that assessment for learning provides both teachers and learners with feedback which helps improve learning [6]. Therefore, the techniques of assessment used and the way feedback is given to learners by instructors who had the HDP training at the EiTEX contribute a lot to bring quality of education in the university in particular, and in the country at large.

15. Conclusion and Recommendations

Teachers who took HDP training were found to be more reflective, both inside and outside their classrooms, in their teaching practice than the non HDP trained ones. HDP trained teachers had better knowledge on ALMs and they were using variety of ALMs compared to the non HDP trained teachers. However, there was no attitudinal difference between the two group regarding ALMs; that was positive. With regard to assessment, HDP trained teachers had better knowledge and practice a range of assessment techniques than the non HDP trained ones. Hence HdP training is very important components for improvement of education quality. The result indicate that HdP trained teachers the parameter for proving the education quality than that of non HdP trained teacher [8, 10]. The major challenges of implementing ALMs and assessment techniques were large class size, classroom setting, lack of resources, students poor background knowledge, students' passivism, and language barriers. This study generates important findings about the application of HDP in EiTEX. However, the researchers confirm that there are some limitations to the study. Work experience and other similar pedagogical trainings of the respondents which might have affected the result of the study were not considered. In addition, the non response rate and high staff turnover could be considered as another limitation to the study.

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