

Evaluation of the Effectiveness of Teaching and Learning in Public Higher Education Institutions of Ethiopia

Girma Lemma¹, WannaLeka² and WegayehuTebeje³

Abstract: *This study explores the state of delivery of education in public universities of Ethiopia by investigating the existing teaching learning practices, and identifying their strengths and limitations. Its intent is to gather and analyze broad and context-based feedback on the effectiveness of the teaching-learning process in higher education institutions that would eventually lead to and help intervention. The study focuses on issues and relevance of programs, courses, and the status of students and teachers in the universities. The study adopted a descriptive survey method. Two different sets of questionnaire were developed for students and instructors at higher education institutions. The instruments for data collection consisted of both open and closed ended items that would help to explore the overall state of teaching and learning environment in higher education institutions. A total of 575 students and 243 staff members were involved in the study. Results indicated that effective teaching and effective learning are two sides of a coin reciprocating in the overall process. Although effective teaching may not necessarily yield effective learning, one cannot doubt that teachers' individual behavioral attributes in and out of the classroom could play major role in realizing expected outcomes in students' behavior. The involvement of students in the teaching and learning process, the application of knowledge and skills to solve life-related problems and the provision of resources and materials to run the instructional processes effectively were views repeatedly suggested by respondents to improve students' learning. The outcome of the study proposes strategies for maintaining and improving educational services for university students.*

¹ Assistant Prof., Institute of Educational Research, Addis Ababa University

² Associate Prof., Institute of Educational Research, Addis Ababa University

³ Assistant Prof., Institute of Educational Research, Addis Ababa University

Background

Rapid changes have been observed in the Ethiopian higher education sector. During the last 10 years, the government has demonstrated continued commitment to expanding equitable access to quality and relevant higher education. There are now 45 functional public universities established in three 'generations' and distributed equitably across the country. This fast change, among other things, includes an increase in student population and greater diversity in the graduate and undergraduate programs. Total enrolment in higher education institutions in 2005/06, for example, was recorded to be 180,117 in all programs, including regular, evening, and summer and distance education for both government and non-government institutions. Out of this, government institutions enrolled 140,426 in the undergraduate and postgraduate (master's and doctoral) programs. The total enrolment in higher education program was 203,399 in 2006/07 while enrollment in the six bands of the undergraduate programs reached 572,419 in the year 2010. These new trends taking place in the country have implications for the teaching and learning process in higher education institutions. Instructors in higher education institutions are expected to bear varied responsibilities of scholarly demands in teaching and researching. They are required to possess the academic knowhow and approaches and provide quality education to students to the expected standard. The situation demands sufficient professional competence to expedite these responsibilities.

Some of the professional qualities required are sound knowledge of subjects in their respective areas, effective use of teaching materials, ability to stimulate creative thinking, capability to arouse interest and enthusiasm in students, appropriate use of assessment as a tool for learning, skill of giving regular and useful feedback on students' work, and ability to promote active involvement of students in the teaching learning process. For instructors to discharge their responsibilities adequately and effectively, updating their skills and knowledge is very essential. One way towards this end is disseminating research

and receiving feedback on the prevailing situations in higher education institutions. Findings from researches should provide strong foundation for much of their current and future understanding of the teaching-learning process in the institutions.

Evaluative researches have often been helpful as a tool for testing whether or not programs are on the right track. Recognizing evaluation of the teaching-learning process as an integral part of the professional practice in higher education institutions and conducting time bound researches is an essential practice and strategy. This view assumes that expertise in teaching is not simply a function of teaching performance but also the result of regular monitoring of teaching performance to identify achievements and limitations where there is scope for improvement (Fry, Ketteridge and Marshall, 2004). Moreover, results of evaluative studies of the teaching and learning process help to provide clear evidence to all stakeholders including government, educational institutions, and all other concerned organizations. Evaluating programs on regular basis and monitoring trends and directions provide information on accountability to the effective use of public fund on the sector.

Race (2001) highlights the basic essentials expected of an instructor in addressing a student-centered approach which includes utilizing different teaching learning situations, exploring learning processes, helping students to learn how they learn, designing new programs to meet students' needs, developing students' basic skills, identifying learning outcomes, and using helpful technologies. Toohey (2002) identified some major desirable qualities of graduates from higher education institutions. These characteristics are field-specific knowledge, shared attributes, and generic attributes. In this regard, the possession of a body of knowledge particular to the field studied, and the possession of general and specific qualities common to most graduates are the most essential qualities expected of graduates. According to Knight (2002), what makes a good teacher in higher

education is very much about being a good designer of tasks and a sensitive facilitator of student engagement with them.

Statement of the problem

As stated in the background section, student population in higher education institutions is growing fast. To meet the demands for educational services by such population, new universities opened all over the country. While the existing universities strive to meet the demands for more intakes, the newly opened ones have also started delivering services for new students. However, while the demand for equity is being addressed, issues relating to efficiency and quality services are emerging to add to the challenges. It is; thus, timely to find out the extent to which universities are addressing quality issues as they try to address the demands for spaces. Dealing with such concerns is one of the urgent issues that all stakeholders in university education need to focus on. It is a strong belief of the research team that the delivery of essential quality education needs to be addressed to prevent the risk of producing unqualified and under-trained graduates who, in fact, are expected to take over various responsibilities in the future. As education is one of the major areas of development in our country, it requires efficient strategies to deliver equity and efficiency. It is, thus, the purpose of this study to investigate the strengths and limitations of the teaching and learning activities currently in practice in higher education institutions, and ultimately enhance the quality of education in the institutions.

Objectives of the study

This study explores the state of delivery of education in Ethiopian Public universities by investigating the existing teaching learning practices, identifying the strengths and limitations of the services, and propose strategies for maintaining and improving educational services. This evaluative study therefore, focuses on the context, issues and methods relevant to programs, courses offered, and status of students

and teachers. From developmental perspective, the concern of this study is not to judge but to gather and analyze broad and context-based feedback on the effectiveness of the teaching-learning process in government higher education institutions and eventually to assist in intervention.

Research questions

- What does effective teaching mean?
- What does effective learning mean?
- How does the concept of equity and efficiency relate to higher education institutions?
- What does the current delivery of educational services in higher education institutions look like?
- What are the strengths observed in the delivery of effective teaching?
- What are the major challenges and shortcomings observed in the delivery of effective teaching?
- What can be done to improve the delivery of educational services?

Theoretical Discourse

Conceptualization of teaching and learning which stems from various schools of thought has subsequently led our world of education to pursuing and practicing those thoughts on an experimental basis for specific situation and using them as models for the application and delivery of education. To mention but a few of the thoughts, to serve as a framework for this study, we would first look at the notion that learning develops by constructing and building new ideas on another. The concept of enriching previous thoughts was introduced by Kant 200 years ago and a number of educational psychologists and educators have since used it. From that time on, constructivism has enjoyed the endorsement of several subsequent scholars including Piaget (1954) and Bruner (1973). Experiential learning and reflection, which stemmed

from this school of thought, has prominent role in higher education. Other thoughts like rationalism, whose advocates include Chomsky, argue that an existing plan unfolds leading us to certain directions. There are still others like Pavlov and Skinner, who center their theories on the idea of forming associations between stimuli and responses. The list of educational theoreticians is quite long; however, Vygotsky(1978)and Skinner(1968) may be added to the list.

As the list could be quite long, this study cannot attempt to exhaust them all. It rather intends to address the question of how much of the above concepts are used as a guideline/s for delivery of education in our higher education institutions. In this study, we draw our research on theories of teaching and learning and their applications in higher education institutions. We chose those theories as applicable to students in higher education institutions assuming that teaching in higher education ought to address and deal with the needs of adults as recipients of the service of teaching. In this study, once we developed our theoretical framework, we were able to focus on the implications of those concepts of teaching and learning for higher education institutions in Ethiopia. In this endeavor, attempts were made to identify some of the common practices and ideas related to learning in higher education and how much of the concepts have been put to practice in the Ethiopian situation.

What student learning envisages is multifaceted. For a long time, cramming of what is labeled as 'knowledge' of some sort involving memorization and reproduction such as recital has been the objective of teaching and learning. For so long, addition of data to the existing inventory of knowledge has been given its share of importance. Developing the inventory has been an impetus for further investigation in making use of acquired knowledge. Understanding and internalizing facts subsequently led to sensing whatever has been acquired, understanding its meaning, and translating it into utilizable and applicable practice. This also led to pursuing knowledge to further project what has been learned into imagination and creativity, thus

contributing to individual and social development by addressing issues, tackling and solving problems. Those pursuits of knowledge have also been springboards for critical thinking and consumption of acquired knowledge.

Teaching students of higher institutions involves adult teaching approaches (andragogy). When adults come to receive education, they bring along their own resources to the learning environment. Teaching adults involves making the best use of their own resources for their learning environment. Another theory of learning developed by Kolb (1984) and his proponents argue that understanding is not a fixed or unchangeable element of thought but is formed and re-formed through 'experience', implying that we all bring our own ideas to the learning situations and processes. This theory suggests concrete experience, reflective observation, abstract conceptualization, and active experimentation. As Knowles (1977) noted, the principles that prompted the development of strategies for teaching adults are helpful in designing and delivering education to students of higher learning. Knowles' theory suggests that person becomes more self-directed as he/she matures and an individual's maturation assumes that there has been all accumulated experience, which in itself is a rich resource for learning. Adults become ready to learn when they experience a need to know something. Our perspectives of educating students of higher learning should thus be based on the concept that unlike children's learning which is subject-centered, adults learning is best achieved if it is problem-centered which generally emanates from themselves as they, in most cases, know their educational purposes, needs, and abilities. How much of the concepts from the various schools of thought are relevant to the principles of higher education utilized in our institutions of higher learning demands study. It is thus the purpose of this study to explore and find out what our institutions of higher education have put to practice, what they have found to be effective, and what their strengths and limitations are in the delivery and reception of educational services.

Research Methodology

Research Design

The study adopted a descriptive survey method. This method involved collecting data in order to answer questions about the current status of the topic of study. This type of method is used to describe and evaluate the teaching and learning processes in higher education institutions in Ethiopia. The study highlights various perspectives of selected models from various educators including Airasian and Gay(2000) model for the preferences, attitudes, practices, concerns, or interests of some group of people. The research utilized a blend of descriptive and comparative approaches. The descriptive approach enabled the identification of the types of teaching practices commonly or specially utilized in the sampled universities, and what the learning situation in the studied universities looks like. A comparative method helped to study how much of each of the identified approaches is implemented in the various universities.

Instruments for Collecting Data

Two different sets of questionnaire, one for students and the other for instructors at the sampled institutions of higher education were developed. Items in the instruments consisted of both open and closed ended questions. They are about demographic information of respondents, facility and resources, instruction related issues, the concept and philosophy of effective teaching and learning, issues of diversity and equity in higher education institutions as related to teaching and learning and other relevant topics.

Sampling and Sample Selection

The institutions selected for this study were Addis Ababa University, Adama University, Haramaya University, Hawassa University, Bahir Dar University, Jimma University, and Mekele University. Main reasons for selection of these universities include the representational nature of these universities in terms of long years of teaching-learning practices, proximity, budget limitation, and time constraint to conduct and report findings of the research to the funding university, i.e., Addis Ababa University. The categories of population included in this study were instructors stratified on the basis of academic rank and sex, and randomly selected students stratified on the basis of sex, year of study, and purposively selected deans and department heads. Based on the approach suggested above, estimation was made with regard to the sample size for the study.

Data Management and Analysis

Data collected through different instruments were coded and categorized to enable interpretation. Following the interpretation, the study identified the strengths and limitations of the teaching and learning processes practiced in Ethiopian universities. Conclusions were thus made based on the findings of the study and these were projected to all Ethiopian universities. Finally, the study forwarded recommendations to address the limitations observed and further strengthen the best practices already seen in the institutions studied. A statistician helped in organizing and analyzing the data using SPSS computer programs. Data obtained from the open-ended items were coded and put under major categories of themes. They were organized and analyzed together with the quantitative data and separately for students and instructors.

Data Presentation and Analysis

Data from Instructors, Deans, and Department Heads

Report on the respondents' background

The study included six universities representing 27% of the total number of government universities. A total of 575 students and 243 staff members were involved in the study. Results are shown in Table 1 below.

Table 1: Names of universities and number of participants in the study

Universities	No. of particip	No. of participating staff
Addis Ababa	82(14.3)	42(17.3)
Bahir Dar	97(16.9)	56 (23.0)
Hawassa	97(16.9)	49 (20.2)
Haramaya	95 (16.5)	53(21.8)
Jimma	101 (17.6)	36(14.8)
Mekelle	98 (17.0)	---
Unidentified	5 (0.9)	7 (2.9)
Total	575 (100%)	243 (100%)

Table 2: Gender composition of the students

Sex	N	%
Male	439	76.3
Female	132	23.0
No response	4	0.7
Total	575	100

We can see from Table 2 that out of 575 students who participated in the study, only 23% were females. The majorities were males and this reflects the existing gender gap in the institutions of higher learning. Furthermore, this gender gap was also reflected in the sex composition of the teaching staff as seen in Table 3 below. This is a typical situation in the institutions of higher learning in Ethiopia.

Table 3: Sex composition of the staff

Sex	N	%
Male	211	86.8
Female	25	10.3
No response	7	2.9

Table 4: Year of study for undergraduate program

Year	N	%
1	49	8.5
2	192	33.4
3	256	44.5
4	71	12.3
6	1	0.2
No response	6	1.0
Total	575	100

Table 5: Number of students by level of study

Level	N	%
Doctoral	11	1.9
Masters	1	0.2
Bachelors	430	74.8
No response	133	23.1
Total	575	100

We can see from Tables 4 and 5 that close to 45% of the students are in their third year whereas 33.4% are in second year. These two groups make up the bulk of participants from the undergraduate program. Moreover, students who study for their first degree make up almost 75% of the student participants. When we look at the profile of staff members who participated in the study with respect to age we see the following.

Table 6: Staff members by age

Age	N	%
Under 30	100	41.2
31-40	86	35.4
41-50	43	17.7
51-60	10	4.1
No response	4	1.6
Total	243	100

In Table 6, we can see that the majority of staff members who participated in the study were below the age of 30 while close to 36% were between the ages of 31 and 40. Due to the mass expansion of institutions of higher learning in Ethiopia, the majority of the staff was young. This reflects the current situations prevailing in the institutions of higher learning. The educational qualification and academic rank of the staff members are shown in Tables 7 and 8 below.

Table 7: Educational level of the teaching staff

Educational level	Number	%
Doctorate	36	14.8
Masters	159	65.4

Bachelors	44	18.1
Unidentified	4	1.6
Total	243	100

Table 8: Academic Rank of the Staff

Academic rank	%
Graduate Asst.	11.1
Assistant Lecturer	8.2
Lecturer	60.1
Assistant Prof.	14.0
Associate Prof.	1.6
Professor	0.4
Unidentified	4.5
Total	100

Table 7 shows that 65.4% of the respondents' had a Master's Degree while close to 15% had a doctorate degree. In Table 8, we see that majority of the respondents were lecturers. This fact characterizes the institutions of higher learning in this country.

Data Analysis of Instructors' Responses to Close Ended Items

Instructors were asked about the meaning and purpose of effective teaching in higher education. They were required to put a tick mark to show their responses to five 'Yes'-'No' items. The three items that had the highest positive frequencies (86% in each case) were: students' ability to express their views, if student's exhibit noticeable change in their behavior and if teachers are able to monitor and evaluate progress and shortcomings of their students. Interestingly, teachers' descriptions of teaching effectiveness were all in terms of change in students' behavior rather than their performance. Results are shown in Table 9 below.

Table 9: Teachers perception on the meaning and purpose of effective teaching

Items	Yes		No		No Response		Total	
	N	%	N	%	N	%	N	%
Students are lectured on all materials indicated in their course outline	107	44.0	112	46.1	24	9.9	243	100
Students are able to express their views	209	86.0	17	7.0	17	7.0	243	100
Students pass their tests and exams	136	56.0	72	29.6	35	14.4	243	100
Students exhibit noticeable changes in their behaviors	208	85.6	21	8.6	14	5.8	243	100
Teachers able to monitor and evaluate progress and shortcomings	208	85.6	16	6.6	19	7.8	243	100

Parallel to the question of effectiveness of teaching, respondents were also asked to describe their agreement or disagreement on the

meaning and purpose of effective learning in higher education institutions. Among the four items meant to describe effective learning, students' ability to relate theory and practice had the highest percentage (91 %) followed by noticeable changes in students' behavior (88%) and ability to express views (87%). As stated above, both teaching effectiveness and learning effectiveness are seen in terms of the benefit students accrue from the instructional process. Percentage distribution for the Yes or No items is shown in Table 10 below.

Table 10: Teachers' perception of the meaning and purpose of effective learning

Item	Yes		No		No Response		Total	
	N	%	N	%	N	%	N	%
Ability to relate theory and practice	222	91.4	12	4.9	9	3.7	243	100
Ability to express their views	213	87.7	15	6.2	15	6.2	243	100
Ability to pass their tests and exams	146	60.1	73	30.0	24	9.9	243	100
Noticeable change in students' behaviors	214	88.1	18	7.4	11	4.5	243	100

Teachers were asked 'Yes' - 'No' questions that address availability of resources necessary to achieve instructional goals, the effective utilization of these resources and their opinion on the contribution of research to effective teaching. Ninety one percent (91 %) of the respondents had the opinion that research contributed to effective teaching and 65% indicated that they utilized the essential resources necessary to achieve the instructional goals. Only 41% of the respondents had access to instructional facilities and resources necessary to achieve instructional goals. Although more than half of the respondents 'claimed they utilized instructional facilities and

resources, it seems that there is scarcity of facilities and resources. Results are shown in Table 11 below.

Table 11: Availability and utilization of resources

Items	Yes	%	No	%	NR	%	Total	%
Do you obtain instructional facilities and resources?	99	40.7	130	53.5	14	5.8	243	100
Do you utilize the essential resources necessary to achieve your teaching goals?	157	64.6	69	28.4	17	7.0	243	100
In your opinion, does research contribute to effective teaching?	222	91.4	13	5.3	8	3.3	243	100

With the intent to find out information about the source of skills and understanding that would, help learning and teaching, five items were listed and respondents were asked to rank-order them according to their contributions. Twenty six (26%) of the respondents indicated student evaluation as their first choice, 24% put workshops and seminars as second, 19% put peer evaluation as third and 18 % ranked faculty and department heads as fourth in their pursuit to raise their skills and understanding about the instructional process. Results are shown in Table 12.

Table 12: Sources for building ones skills and understanding about learning

Items	First		Second		Third		Fourth		Fifth	
Student evaluation	64	26.3	30	12.3	34	14.0	26	10.7	26	10.7
Peer evaluation	10	4.1	48	19.8	47	19.3	43	17.7	26	10.7
Workshops and seminars	34	14.0	59	24.3	31	12.8	35	14.4	18	7.4
Faculty or department heads	14	5.8	13	5.3	33	13.6	43	17.7	69	28.4
Research outputs Published in journals	58	23.9	32	13.2	28	11.5	27	11.1	34	14

Items in Table 13 are about the teaching strategies instructors of higher education institutions use to achieve their instructional objectives. Respondents were required to put a tick mark to show their most used teaching strategy. As shown in Table 13, 33% of the respondents mostly used the lecture method followed by combination of teacher dominated activity and student discussions (15%). The lowest percentage (0.8%) was for the item, which asked about the use of student centered learning activities and engaging students in discussions.

Table 13: Teaching approaches most often used to achieve instructional objectives

Teaching Approaches	N	%
Mostly lecture method	81	33.3
Mostly having teachers as center of the learning activities and engaging students in discussions	37	15.2
Mostly brainstorming (using student inputs in the learning activities)	24	9.9
Mostly student-centered learning activities and engaging students in discussions	2	.8
Mostly project based learning activities	9	3.7
No response	90	37
Total	243	100.

In relation to the items in Table 14, which asked respondents about the use of instructional methods, respondents were asked to rank-order constraints, which pose problems in using the methods. Listed constraints included resources as well as problems related to students and teachers. For example, constraints put in rank order were large class size (42%), students' language problems (24.7%), and lack of instructional materials (9.1 %). Further details are shown in Table 14 below.

Table 14: Constraints in using teaching and learning methods

Items	Rank											
	First		Second		Third		Fourth		Fifth		Sixth	
	f	%	f	%	f	%	f	%	f	%	f	%
Students' language problems	60	24.7	52	21.4	46	18.9	19	7.8	14	5.8	10	4.1
Large class size	102	42.0	49	20.2	21	8.6	10	4.1	10	4.1	6	2.5
Lack of instructional materials	22	9.1	58	23.9	60	24.7	45	18.5	8	3.3	5	2.1
Lack of pedagogical training	9	3.7	11	4.5	29	11.9	39	16.0	47	19.3	43	17.7
Lack of collegial support	2	.8	4	1.6	14	5.8	40	16.5	65	26.7	53	21.8
Shortage of time to complete course	7	2.9	31	12.8	26	10.7	37	15.2	31	12.8	58	23.9

Instructors were asked to rate the extent to which they use different kinds of assessment techniques on a three point scale ranging from often to not at all. It was found out that 52% often used regular tests to assess students' performance while 27% used them only sometimes. About 37% indicated that they used not only final examinations to assess students' performances. Forty percent (40%) used project work *often* and 41% used examinations *sometimes*.

Table 15: Modes of assessment used by instructors to evaluate performances

Item	Often		Sometimes		Not at all		No response		Total	
Regular tests plus exams	126	51.9	65	26.7	9	3.7	43	17.7	243	100
Only final exams	29	11.9	42	17.3	89	36.6	83	34.2	243	100
Project work and exams	97	39.9	100	41.2	12	4.9	34	14.0	243	100

The last item putto instructorswere about their interpersonal relationship with students. Most of them (68%) indicated that their relationship was professional. About 8% indicated that it was at a societal level. In fact, asignificant number of respondents (25%) did not respond to this question either because they deliberately did itor because the item was ambiguous. Results are shown in Table 16.

Table 16: Instructors' Interpersonal relationships with students

Item	Professional		Societal		No response		Total	
Instructors' interpersonal relationships with their students	N	%	N	%	N	%	N	%
	165	67.91	18	7.4	60	124.7	243	100

Data Analysis of Students' Responses to Close Ended Items

Students were asked to indicate the common teaching and learning problems they encountered at universities. The problems were classifiedinto two major categories. The first list of problems was related to availability of facilities whilethesecond was about availability of resources. About 56% of the respondents indicated that facilities and services related to library werethemajor problems in the course of their study. The second major problem was related

to availability of suitable classrooms (45%) followed by mismatch between class size and number of students (39%).

With regard to problems associated with availability of materials and resources, majority cited lack of relevant books as a major source of problem (63%), followed by lack of access to ICT facilities (60%) and shortage of relevant journals and periodicals (36%). A glance at the response patterns in the two tables shows that students are more concerned about the library situation, facilities, and services provided by the respective institutions. In general, when the Yes-No responses in the two tables are studied, it is understood that students perceived shortage of learning materials as a serious problem compared to facilities and buildings. Results are shown in Tables 17 and 18 below.

Table 17: Problems related to facilities and resources

Item	Yes		No		No response		Total	
	N	%	N	%	N	%	N	%
Problems of suitable classrooms of availability	258	44.9	317	55.1	-	-	575	100
Problems of class size and number of students	225	39.1	349	60.7	1	0.2	575	100
Problem of lecture/meeting halls	201	35.0	374	65.0	-	-	575	100
Library problems	319	55.5	256	44.5	-	-	575	100
Laboratory problems	216	37.6	359	62.4	-	-	575	100

Table 18: Problems related to learning materials and resources

Item	Yes		No		NR		Total	
	N	%	N	%	N	%	N	%
Shortage of relevant books	360	62.6	214	34.7	1	0.2	575	100
Shortage of relevant journals and periodicals	209	36.3	365	63.5	1	0.2	575	100
Problems of access to ICT facilities	342	59.5	232	40.3	1	0.2	575	100

Respondents were asked to identify major strengths and weaknesses their instructors showed in the teaching learning process. The major strength of teachers reported by students was their capacity to manage classroom activity (63%). This was followed by evaluation of students' performance (54%). On the other hand, the two items that were seen as major weaknesses of the instructors were facilitation of intellectual development and delivery of high quality instruction 45% and 44% respectively. In general, with regard to the items listed as areas of strength and weakness, it appears that the positive aspects outweigh the shortcomings of the instructors. Results are shown in Table 19 and 20.

Table 19: Areas in which instructors showed strength

Item	Yes		No		NR		Total	
	N	%	N	%	N	%	N	%
Facilitate intellectual development	278	48.3	257	44.7	40	7.0	575	100
Manage Classroom activity	365	63.5	173	30.1	37	6.4	575	100
Deliver high quality instruction	276	48.0	261	45.4	38	6.6	575	100
Evaluate learning	309	53.7	227	39.5	39	6.8	575	100
Adapt to changing requirements	226	39.3	303	52.7	46	8.0	575	100

Table 20: Areas in which instructors showed weaknesses

Item		Yes		No		NR		Total	
		N	%	N	%	N	%	N	%
Facilitate intellectual development		261	45.4	262	45.6	52	9.0	575	100
Mange activity	Classroom	188	32.7	332	57.7	55	9.6	575	100
Deliver high quality instruction		253	44.0	266	46.3	56	9.7	575	100
Evaluate learning		236	41.0	285	49.6	54	9.4	575	100
Adapt to changing requirements		247	43.0	264	45.9	64	11.1	575	100

Students were asked to indicate their level of satisfaction with the quality of teaching offered in the universities. Response showed that almost half (46%) of them were not satisfied with the quality of teaching provided by the instructors. In the previous table, almost the same number of students indicated that lack of delivering high quality education was a fundamental weakness of instructors. It seems that the data in the two tables reciprocate each other. This is shown in Table 21 below.

Table 21: Students' level of satisfaction with the quality of teaching

Item	Satisfied		Not satisfied		Not sure		No response		Total	
	N	%	N	%	N	%	N	%	N	%
Satisfaction with quality of teaching	197	34.3	265	46.1	105	18.3	8	1.4	575	100

Students were asked whether their ability to work independently and solve problems increased because of university instruction. In both cases, most of the students positively responded to the items. Seventy three percent (73%) of the respondents felt that studying at university increased their ability to work independently and 77% felt that their problem solving ability increased due to the learning experiences

gained in the institution. The majority responded positively which suggests the benefits students accrued from studying at the respective universities. Results are shown in Table 22 and 23.

Table 22: Students' ability to work independently

Item	Yes		No		NR		Total	
	N	%	N	%	N	%	N	%
Do you feel that your ability to work independently has increased because of studying at university?	417	72.5	155	27.0	3	0.5	575	100.0

Table 23: Students' ability to solve problems

Item	Yes		No		NR		Total	
	N	%	N	%	N	%	N	%
Do you feel that your ability to solve problems has increased because of studying at university?	441	76.7	129	22.4	5	0.9	575	100.0

Students were also asked to evaluate the effectiveness of the teaching-learning process at the university. Forty six percent (46%) rated the process as 'ineffective' while 34% rated it otherwise. The ineffectiveness of the process could be attributed to lack of facilities and resources, teachers' characteristics or poor support system in the respective universities. Table 24 shows distribution of the responses along the three categories.

Table 24: Evaluation of the overall effectiveness of the teaching learning process

Items	Effective		Not effective		Not sure		No response		Total	
	N	%	N	%	N	%	N	%	N	%
How do you evaluate the effectiveness of teaching /learning process in your university?	197	34.3	265	46.1	105	18.3	8	1.4	575	100

Respondents were asked to rank-order their preferences of learning styles. Seventy six percent (76%) preferred practice-based learning, 59% chose group learning, and 55% opted for competitive learning. A substantial number (45%) preferred independent learning as their learning strategy. The least chosen strategy was using the teacher as a source of knowledge. In general, practical learning and collaborative learning were the most preferred learning styles. The preference for practice-based learning was further confirmed by the pattern of responses shown in Table 31 and 32 on effective teaching and effective learning. Percentage distribution for the five types of learning styles is shown in Table 25.

Table 25: Respondents preference of learning styles

Items	Yes		No		NR		Total	
	N	%	N	%	N	%	N	%
Independent learning	258	44.9	265	46.1	52	9.0	575	100
Group learning	340	59.1	182	31.7	53	9.2	575	100
Practice based learning	437	76.0	84	14.6	54	9.4	575	100
Competitive learning	318	55.3	202	35.1	55	9.6	575	100
Depends on the teacher as source of knowledge/information	157	27.3	365	63.5	53	9.2	575	100

Students were asked to share their views about the role played by the learner in the teaching learning process. Eighty nine percent of the respondents acknowledged the importance of involving students in the learning process and only 9% indicated that students have no role. This response pattern matches with the distribution shown in Table 25, which assumes the teacher as source of information in the choice of learning style. Results are shown in Table 26.

Table 26: Respondents perception on the role of students in teaching and learning

Item	Yes		NO		NR		Total	
	N	%	N	%	N	%	N	%
Do you believe that students have roles in the teaching-learning activities?	512	89.0	53	9.2	10	1.7	575	100

Students were also asked if universities utilize community resources for the teaching-learning process. Results showed that most of them (67%) were not aware of the universities' use of resources outside their territory. The poor utilization of such resources for enriching the teaching-learning process might indicate the loose connection between universities and their communities at large. Results are shown in Table 27.

Table 27: Universities' utilization of outside resources

Items	Yes		No		NR		Total	
	N	%	N	%	N	%	N	%
Are you aware that your university utilizes resources other than its own for the purpose of teaching/learning?	166	28.9	385	67.0	24	4.2	575	100

Respondents were also asked to rate the extent to which they get advice or support from their instructors. Twenty three percent (23%) reported the support was satisfactory; 51% said it was satisfactory only to a certain extent but 20% remarked it was not satisfactory at all. Advice was given by instructors during consultation hours. However, a little more than half stated that the support they get from their instructors was not to their satisfaction. This is shown in Table 28 below.

Table 28: Respondents' level of satisfaction with advice or support received

Item	Satisfactory		Satisfactory to a certain extent		Not satisfactory at all		No response		Total	
	N	%	N	%	N	%	N	%	N	%
To what extent is the advice or support you get satisfactory?	131	22.8	295	51.3	115	20	34	5.9	575	100

Students were asked to show the modes of assessment used and how frequently instructors use these modes of assessment. Each mode of assessment was to be rated on a three-point scale - 'often', 'sometimes', and 'not at all'. It can be seen from Table 29 that instructors tend to use the three modes of assessing students' performances alternatively. Percentage distribution of frequencies across the three modes, however, shows that instructors use each 'sometimes', 'often' or 'not at all', i.e., they use a combination of assessment techniques to

measure achievement of their students. Furthermore, with regard to feedback on the effectiveness of teaching, students were asked if instructors seek feedback to improve their teaching. Fifty three percent (53%) responded that instructors did not ask for such feedback while 40% said they did. Table 29 thus shows that instructors do not adequately use feedback on the instructional process to improve instruction students' performance. This is shown in Tables 29 and 30 below.

Table 29: Modes of assessment used by instructors

Item	Often		Sometimes		Not at all		No response		Total	
Regular tests and exams	220	38.3	235	40.9	63	11.0	57	9.9	575	100
Only final exams	189	32.9	224	39.0	83	14.4	79	13.7	575	100
Project works/exam/s	76	13.2	315	54.8	123	21.4	61	10.6	575	100

Table 30: Students 'feedback on the effectiveness of the teaching-learning process

Item	Yes		No		NR		Total	
	N	%	N	%	N	%	N	%
Do your instructors seek students' feedback about the effectiveness of the teaching/learning process?	232	40.3	306	53.2	37	6.4	575	100.

Students were asked to describe what effective teaching and effective learning might mean to them. For most of them, it meant giving course work (62%) and encouraging students to express their views (61 %). Fifty eight (58%) of the respondents as well explained effective teaching in terms of content coverage and equal treatment of students. Parallel to that, effective learning mean relating theory with practice (60%), active participation in class discussions (58%) and covering the learning material within the specified period (49%). In both cases, timely coverage of course work was perceived as an indication of effectiveness. Percentage distribution of responses across the items is shown in Tables 31 and 32.

Table 31: Rank-ordering effective teaching in terms of importance

Item	Yes N	%	No N	%	NR N	%	Total N	%
Giving course work	356	61.9	136	23.7	492	85.6	575	100.0
Covering the contents stated in the course outline	336	58.4	154	26.8	85	14.8	575	100.0
Encouraging students to express their views	348	60.5	146	25.4	81	14.1	575	100.0
Giving periodic tests and examinations	289	50.3	206	35.8	80	13.9	575	100.0
Giving feedback after	216	37.6	268	46.6	91	15.8	575	100.0
Treating all students equally	336	58.4	152	26.4	87	15.1	575	100.0

Table 32: Rank-ordering effective learning in terms of importance

Item	Yes		No		NR		Total	
	N	%	N	%	N	%	N	%
Covering the materials included in the course	275	47.8	210	36.5	90	15.7	575	100.
Passing tests and exams	226	39.3	263	45.7	86	15.0	575	100.
Actively participating in class discussions	336	58.4	153	26.6	86	15.0	575	100.
Relating theory with practice	345	60.0	145	25.2	85	14.8	575	100.
Completing assignments on time	230	40.0	257	44.7	88	15.3	575	100.
Doing class projects in group	210	36.5	276	48.0	89	15.5	575	100.
Having good relationship with teachers	264	45.9	222	38.6	89	15.5	575	100.

Analysis of open-ended responses given by instructors

In their responses to open-ended items, instructors expressed their views on what makes effective teaching in higher institutions. Accordingly, they suggested three aspects or features: the teacher, the students, and the institution. One was from what is manifested in students' performance, i.e. teaching is effective when students are capable problem-solvers, evaluators, self-confident and practical in their performances. Respondents considered students' role as an important factor to contribute to effective teaching. Moreover, when students reorganized and can reflect on their own learning, think critically and maintain appropriate behavior for learning, teaching can become effective. Effectiveness of teaching was also explained in terms of teachers' behaviors, which included their abilities to manage their time and live up to the time lines, and achieve the desired goals. Effective teaching would be realized when the teacher has the essential ability to teach, when there is mastery of subject matter and sound knowledge of the subjects he/she teaches. Furthermore, teachers' essential dedication and work habit such as continuous assessment of

teaching effectiveness also helps attain teaching effectiveness. Effectiveness of teaching is also expedited when there is an interaction between the teacher and his/her students and when instructors apply various kinds of active learning approaches. Respondents also thought teachers' participation especially in preparation; modification and improvement of teaching materials, course syllables, etc. would enhance the effectiveness of teaching. The institutional environment that would facilitate teaching effectiveness was equally important. Such facilities included reasonable teacher-student ratio, workloads, and necessary learning facilities. Teachers with proper orientation and training are capable of producing effective teaching. Respondents believed that passing of examinations or obtaining good scores by students did not necessarily mean that teaching had been effective. They rather thought teaching would be effective when students were motivated to learn, invested their time and energy in their learning and showed meaningful change of behavior.

Instructors also expressed views on what they thought effective student learning was. Accordingly, important elements raised were students' active engagement in learning, applying what they learned to their real life, incorporating theory and practice, and independently pursuing knowledge by reading books or browsing the Internet. When students have acquired sufficient skills and knowledge, and are able to develop independent and critical analyses of what they have learned, then learning can be considered to have been effective. Effective learning is also manifested in humble behavior and positive attitude towards instructors. Ability to utilize essential tools for learning such as computer and the internet suggest students are able to use proper instruments for learning. Furthermore, students are considered to have learned effectively if they can successfully compete nationally and internationally. The respondents also suggested Conditions for effective learning. They believed effective learning would take place when there is an interaction between the teacher and his/her students, and within themselves. On the other hand, they mentioned that the role of institutional provisions such as, sufficient resources, and

student intake policies were important to promote students 'effective learning. The response of the industry towards the graduates is reflective of how much effectively graduates had learned before they joined their institutions. In this regard, institutions that send students to higher institutions should equip them with sufficient trainable capacity. Assigning capable teachers and utilizing varied teaching approaches would contribute to effective learning.

Responses on conditions that help realize effective teaching

Instructors identified factors that enhance effective teaching: the instructors, the students, and the institutions. The most important factor for achieving effective teaching, as presented in Table 33, was the professional capacity and competency of instructors including their experience, discipline, and education, skills in pedagogy and classroom management. Availability of relevant teaching materials, manageable class size, and essential facilities such as workshops, well equipped labs, classrooms, library, computer, and internet services were listed as factors of second-line importance.

Table 33: Responses on conditions, which help, realize effective teaching

Suggested conditions	Frequency
Availability of relevant teaching materials	62
Manageable class size	53
Availability of up-to-date reference materials (journals, books, ...)	28
Conducive teaching and learning environment (good administration, office, equipment, teaching aids, etc.)	31
Professional capacity and competency of instructors (experience, discipline, education, skills in pedagogy and classroom management)	93
Appropriate salary, compensation and motivation for instructors	26
Facilities (workshops, well equipped labs, classrooms, library and internet)	53
Background (high school)- competency of students when joining university	27

Instructors also mentioned a number of expected behavioral qualities on the part of teachers, which they believed would contribute to effective teaching and learning. Such behavioral matters included: instructors' being models for ideal or acceptable behavior, organized and well-prepared delivery of learning activities and instructors' sufficient knowledge of relevant learning contents, intensive reading on their subject areas, use of technology and various other instructional aids, competence to make the best use of the internet, being professionally motivated and motivating their students, proficiency in the English language, appropriate utilization of active, interactive and practice-based learning, realizing and considering individual differences, making a habit of practicing team work, practicing student-centered teaching, promoting student discoveries and independent pursuit of knowledge, encouraging student feedbacks and addressing their concerns, utilizing and addressing peer/colleague evaluation or support, forging working relationships with students, having the habit of making the best use of surrounding or inter-university resources other than what their institutions provide, willingness to deliver proper advisement and help students outside class, and fairness in assessments and grading,

Respondents also identified students' roles for realizing effective teaching and learning. This included their attitudes towards those engaged in the teaching-learning, efforts to actively engage in interactive learning, motivation, their determination to make fair evaluation of their teachers, sufficient language fluency; habit to carry out intensive reading, their interest, motivation and goal-oriented behaviors, desire for establishing working relationships with their instructors, their habits of regularly accessing the internet, and delivering fair evaluation of their instructors.

Institutional roles for enhancing effective teaching and learning

Instructors provided several suggestions on the roles that should be played by institutions to improve the effectiveness of teaching and

learning. Institutional roles referring to either the Ministry of Education or the respective universities were identified in terms of developing policies and establishing facilities.

Policies and programs

Institutions need to make it a principle to emphasize on quality while they strive to meet the intake capacities. In this regard, they need to place students in accordance with their capabilities. Institutions need to allow academic freedom. Developing appropriate curricula and periodical reviews need to be realized as one of the policy requirements.

Administration

Respondents believe that the administration needs to be genuinely willing to provide efficient management and necessary support to help efficient running of instructional deliveries. Reducing loads and non-academic burdens of instructors to a reasonable standard is one important role that academic officers need to look into. Departments need to set proper scheduling of educational programs. The administration has to see to it that instructors receive continuous updates or in-service trainings to improve and maintain their professional strengths. Students assigned to universities must be provided with essential accommodations. Efforts have to be made to improve the living conditions of students. Periodical assessment of instructors' performances conducted with student and peer evaluations or departmental reports [if there are such practices] need to be reviewed and responded to. Conducting regular and periodical meetings between instructors and academic officers establishes strong working relationships in the academic environment. By the same token, grading/evaluation assessment systems need to be constantly addressed. Organizing practical training and workshops on effective teaching methods, training and assigning qualified and up-to-the-standard instructor and providing sufficient research support

were mentioned as essential effective administrative factors for effective teaching/learning.

Facilities

Sufficient facilities for learning including appropriate classrooms and seats, computers and the Internet are essential facilities that need to be addressed. Reading materials should be provided in the central and departmental libraries. Continuous updating of reference materials need to be addressed as a matter of priority. Establishing facilities for training and workshops for improving teachers' professional competence and language [English] skills and providing language-support services, and designing practical feedback and evaluation system or tools need to be addressed to help achieve effective learning in universities. In general, responses received from instructors on conditions that help realize effective learning are presented in the table below.

Table 34: Responses on conditions that help realize effective learning

Suggested conditions	Frequency
Accessibility of relevant teaching and learning materials	30
Active engagement of students, student-centered teaching methods	19
Manageable class size	29
Teaching methodology of the instructor	11
Diligence and dedication of students to learn	28
Availability of reference books	14
Qualified and competent instructors (Master's degree and above)	20
Background of students at high school and their readiness when they join university	33
Good relationship between students and instructors	14
Providing students with necessary facilities (library, laboratory, Internet)	37

Respondents' views on conditions that help to realize effective learning could be categorized into five and are related to practices, facilities, policy/system, instructors' roles, and students' roles.

Practices

This includes matters related to continuous assessment, adequate orientation for newentrants, proper advisement, grading/evaluation, assessmentsystem,research-oriented practice, and regular/periodical meetings.

Facilities

This category includes essential human and material resources, sufficient accommodation especially classrooms with conducive learning environment, support programs such as tutorial and language skill development programs, efficient management, provision of ICT and other learning facilities, appropriate curricula, academic freedom, and suitable living conditions of students.

Policy/system

This is concerned with focusing on quality in student intakes and delivery of instruction, developing quality-oriented policies, enabling universities', and putting in placestudentscreening practices.

Instructors' roles

Included in this category is motivation of instructors, consideration of students' individual differences, establishment of interactive learning, developing working relations, assigning project, practical works, and student presentations to improve theirconfidence and independent work and professional dedication.

Students' roles

This deals with students' motivation, proper behavior,andinteraction with instructors and peers, reading culture and independent exploration

of knowledge, relating theory and practice, ability to take notes from lectures, and habit of utilizing learning resources.

Opportunities

This refers to availability of employment opportunities.

Responses on how research can contribute to effective learning

Table 35: Respondents' views on how research can contribute to effective learning

Suggestions	Frequency
Identifying problems and recommending possible solutions (Remedies) for effective teaching	79
Upgrading knowledge of instructors and students	24
Investigating new ideas/knowledge	17
Linking theories and practice	20
Finding and applying new methods of teaching	28
Understanding effective teaching methods	13

Most of the respondents, (79) thought that research could help to identify problems and recommend possible solutions for effective teaching. They also mentioned that research helps to upgrade the knowledge of instructors and students. Through research, new ideas could emerge, thus improving the capacity of practitioners to link theory with practice. Research can also help to find new methods to be applied to teaching. Effective teaching can be better understood through the practice of research. Respondents believed that it is important to be practical in the application of what is learned. For example, they stated that it is important to relate theory to solve the problems of the community. In this regard, it is important for the students to acquire independent thinking. Researchers, as they conduct their studies, tend to think about issues thoroughly. They

collect as much data as possible to develop their ideas. This practice ultimately enhances their competencies in developing sound instructional contents. There are times when research practitioners need to re-design or correct the ways (methods) of teaching as a result (because) of their research experiences. Aside from enabling instructors to develop better instructional forms and contents, the experience develops instructors' analytical and presentation skills.

Respondents also thought that education needs to be able to make what is learned an instrument of problem solving. This in turn requires that education delivered should be tangible. To achieve this, it is important for the instructors or students to demonstrate appropriate behavior. On the other hand, the real implementation of theories and practices need to develop sound capacity for interpreting concepts into actions. Research practices enhance teachers' capabilities to become effective instructors, make students more focused on their area of interest, and reduce one-way lecture method. The world is changing and new technologies and ideas should be investigated for use in education. Research (knowledge production) and teaching (knowledge dissemination) go hand in hand. It is, therefore, necessary to encourage academic staff members to employ action-oriented teaching practice. Critically thinking instructors are more capable teachers who can inculcate students' critical thinking and problem solving ability. These purposes could be realized by providing practical examples, and by practicing action research to achieve effective teaching.

All respondents did not share the above views. Some believed that research alone could not improve the teaching and learning process, as a research may not be directly related to classroom teaching. They also believed that research did not give immediate response to the demands of teaching learning effectiveness. They thought research projects were primarily designed to promote personal growth, rather than to seek solutions for problems in the education system. Effective teaching, they believed, was an art and did not come from research.

They further thought that researches were rather more donor-driven and thus were irrelevant to effective teaching-learning. The best solution for achieving effective teaching learning, they believed, was using student-centered approaches, and delivering projects and assignments so that students could be engaged actively. They also believed that enough knowledge of method and content were more important than research for achieving effective teaching-learning.

Analysis of Responses Given by Students to the Open-Ended Questions

Students were given closed and open-ended questions to respond to. In this section, responses given to each of the open ended questions are discussed in details. The students were asked to list what satisfied them most in relation to the teaching-learning process. Their responses included teaching methods, qualification of teachers, availability of facilities and materials (resources), methods of assessment, classroom management, student/teacher relationships, and others of which the major ones are presented in the table below.

Table 36: Responses given by students on what satisfied them most in relation to teaching-learning

Variables that satisfied them most	Frequency
Student-centered teaching-learning, active learning	31
Quality instruction	10
Lecture and discussion methods	34
Theories and practice combined	48
Group work and assignment	9
Starting and ending course work as scheduled	15

In Table 36 above, we can see that the students favored the teaching method that combined both theory and practice most. Lecture and

discussion methods came second followed by student-centered approach. We can say that students liked different teaching methods indicating, (which indicate) that there is no single teaching method that satisfies all kinds of students. Teaching methods should be tailored according (to) different situations.

Students also gave suggestions on the availability of materials and facilities that as it affects the extent of their satisfaction in relation to teaching-learning. This is shown in Table 37 below.

Table 37: Students' responses in relation to the availability of materials and facilities that affect teaching-learning

Availability of materials and facilities	Frequency
Internet access	8
Availability of all materials	17
Reference books in the library	26
Handouts	24
Well-equipped laboratory	17
Library services	19
ICT facilities	8

Availability of materials and facilities in the institutions of higher learning is very critical. Without such materials, teaching-learning cannot take place properly. Materials and facilities are important inputs for the teaching/learning process. As shown in Table 37, students consider the availability of materials, well-equipped laboratories, reference books, ICT, as well as Internet access as desirable. The presence of these things and their usage would enhance teaching/learning and will satisfy them most.

The students also expressed views concerning their instructors. They indicated they like to have qualified and experienced lecturers.

Moreover, they wanted their instructors to be confident, committed, and efficient in teaching their respective subjects. They also wanted instructors who treat them equally. They would like their instructors to be punctual all the time. The students expected to be equipped with intellectual development, the ability to solve individual and societal problems, creativity and that their education is in line with current national development endeavor. They also wanted to be assessed fairly. They suggested that appropriate exams and assessments are essential. They appreciated proper evaluation mechanism based on students' performances. Finally, they said they would like to have cordial relationships with their instructors. These are some of the sources of satisfaction with the teaching-learning process.

Students were also asked to state what dissatisfies them most. Their responses are shown in Table 38.

Table 38: Teaching-learning related factors causing students 'dissatisfaction

Factors causing students'dissatisfaction	Frequency
Poor ability of instructors	7
Attitude of instructors (rigidity, cruelty etc.)	51
Careless teaching	14
Poor facilities	14
Poor teaching methods	18
Teachers lacking basic subject knowledge and little experience	77
Poor qualification of instructors	14
Unequal treatment of students	25
Crowded classrooms	18
Unfair exams and tests unrelated with the topic covered	20
Bias towards some ethnic groups	14
Lack of learning materials	16
Too theoreticalteaching-learning	28
Teacher-centered teaching	11
Teachers' late coming for class	22
Teachers absenting from classes	16
Unbalanced teaching practices	23
Failure to cover course contents as scheduled	17

As understood from Table 38, factors that cause dissatisfaction among students of higher education institutions are mostly related to instructors and facilities. On the instructor side, students said that they observe lack of basic subject knowledge of what they teach and also limited teaching experiences. Profiles of instructors from the six universities in the study also attest to this (see Tables 5 and 7). Large class size, lack of materials (resources) and poor facilities were further mentioned. Poor teaching methods coupled with failure to cover courses as scheduled make it hard for the students to gain enough knowledge. When all these add up, one can say that the teaching-learning environment was poorly conducive and caused

student dissatisfaction. Other causes of dissatisfaction included poor evaluation mechanisms and biases towards some ethnic groups.

Students were also asked to describe their interpersonal relationships with instructors. Major reactions to this particular question are summarized in Table 39.

Table 39: Interpersonal relationships between instructors and students

Level of relationships	Frequency
No personal relationship	78
Somewhat friendly but not with all instructors	46
Very weak relationship	24
Good relationships	86
Almost no relationship	15
Very good relationship	14
Friendly	10
Smooth	14
Professional relationship	12

The students made various comments in response to this particular question. A number of them said that some of their teachers do not want to have any kind of relationship with them. Few said that some teachers have a low-key relationship. A good number of them indicated that they have no relationship with any one of the instructors. Still others said that they have relationship with their instructors although the degree seemed to vary from student to student. Expressions like smooth, very good, brotherly and sisterly, not bad, better, like father and son, like best friend, professional, and not close enough were used to describe the relationship. Some cued that it depended on the interest of the instructors. In general, the relationship between the two groups varied a lot.

Students were also asked to state ways in which their instructors could help them to learn effectively. Main points raised are presented in Table 40 below.

Table 40: How instructors could help, students learn effectively

Ways in which students think their instructors could help	Frequency
Giving advice	78
Encouraging students to participate in class	35
Providing practical activities to help students learn	93
Giving good lectures	63
Giving helpful handouts	31
Using problem-solving approach	25
Adequate preparation before lecturing	20
Presenting the course material appropriately	15
Creating good classroom atmosphere and relationships	36
Treating and evaluating students equally without discrimination	23
Providing different materials to students	26
Using time effectively and being punctual	22
Motivating students	24
Using group work and discussion	21
Encouraging students for further learning	12
Being practical in teaching	17
Giving tutorial classes	46
Giving assignments	23

In Table 40, students clearly outlined their views on how an instructor could help students to learn effectively. The suggestions given include issues related to advisement, good teaching methods, interpersonal relationships, fairness in dealing with students, punctuality of instructors, motivation factors, giving handouts, fair evaluation mechanisms, effective use of time and encouraging group work and

giving assignments. The suggestions outlined in Table 40 are practical ones that definitely help both the instructors and the students.

Students were also asked the purpose for which instructors use the feedback they get from their students. Responses included creating good teaching-learning atmosphere and improving their teaching methods. Respondents also showed that some instructors discuss the feedback with their students while others ignore the feedback given. With regard to how their teachers address inappropriate behavior in the class, the respondents listed the following.

- Penalizing the student by reducing a few points from his/her exam results
- Giving verbal warning
- Dismissing the student from lecture classes
- Using own imagination to handle the situation

Summary and Implications

Summary

The purpose of this research was to investigate important issues related to the effectiveness of teaching and learning in higher education institutions in Ethiopia and identify strengths and limitations to make all stakeholders (stakeholders) aware of what needs improvements and/or what should be further maintained to provide effective services in the universities. The study, with its stated purposes, was deemed to help strengthen the effective practices of teaching and learning in higher education institutions of Ethiopia by suggesting useful strategies for improving the delivery of quality education.

Self-report questionnaires were administered to 575 students and 243 instructors randomly drawn from six public universities of Ethiopia.

Both quantitative and qualitative data were generated using the instruments and were analyzed to highlight major findings related to students' and instructors' perceptions of teaching-learning effectiveness and the contextual resources and services that would enhance delivery of quality education in the selected public higher education institutions.

Effective teaching in higher education institutions is a multi-faceted phenomenon, which cannot be described by a single aspect of the process. It involves teachers and students behavior, availability, and access to resources, relationships within and without the communities of the universities as well as a host of other factors. The problems associated with teaching-learning process in higher education institutions as well include a number of human and logistic related factors. Hence, this boundary would emphasize the relevance of interventions at several points along the continuum in order to bring meaningful and effective outcome in students' profile. In fact, the study was able to identify some features that are more important than others and depicted priority areas of problems. Although students and instructors perceived effective teaching-learning from their own perspective, interestingly, respondents (students, instructors and academic leaders) assessed effectiveness in terms of changes observed in students' behavior at exit points.

Effective teaching and effective learning are two sides of a coin reciprocating in the overall process. Although effective teaching may not necessarily yield effective learning, one cannot doubt that teachers' individual behavioral attributes in and out of the classroom could play a major role in bringing about expected outcomes in students' behavior. The qualitative data, for example, highlighted important points, which can be clustered around teachers, students and the institutions. The involvement of students in the teaching-learning process, the application of knowledge and skills to solve life-related problems and the provision of resources and materials to run effectively the instructional processes were views repeatedly suggested by

respondents. In general, from the analyses, the following major findings can be outlined.

- Teaching-learning effectiveness was understood by both teachers and students in terms of noticeable behavioral changes brought about in the students. Students' ability to express their ideas clearly, their ability to relate theory and practice, teachers' ability to facilitate the intellectual development of their students by delivering high quality instruction were some of the findings from the questionnaires.
- Teaching approaches and the methods of assessment used to achieve instructional objectives were important elements in the findings. In most cases, teachers tended to use the traditional teacher-centered approaches for reasons related to large class size in the universities and shortages of instructional technology facilities. These situations were major areas of concern possibly hindering teachers from delivering effective instruction.
- Problems related to library resources, mismatch between the number of students and classroom spaces, shortage of relevant books, ICT teachers, journals and periodicals were some of the basic problems related to facilities and resources as reported by students.
- Quite a significant number of students reported their dissatisfactions with the quality of teaching in higher education institutions although they reported that the instructors have shown strength in managing classroom activities and in their evaluation of delivery of teachings. Teachers' competence and their capacity to adapt to changes were reported as major weaknesses. Although the majority of students preferred group learning and practice-based learning as their choice of teaching styles, teachers' 'adaptability to students' learning styles seemed to be inadequate. This could be one possible explanation for students to evaluate the overall effectiveness of the teaching-learning process as 'not effective'.

Implications

In order to address important issues and challenges presented in the findings of the study, some suggestions and implications for stakeholders to focus on are presented in this section. Suggestions and implications may be looked at from two perspectives. First, in spite of various hurdles against effective delivery of instructions, there were strengths that students acknowledged about the instructional activities.

Stakeholders need to realize that effective teaching includes so many activities that involve providers and recipients, and need to see that all those provisions are properly utilized to the best of their abilities. For example, using available external resources in their surrounding is one best target that needs to win the focus of instructors and educational forces in higher institutions. For that matter, students have equally important roles in identifying such external resources that can help enrich the effectiveness of teaching-learning.

The use of instructional technologies for effective teaching-learning has to be addressed properly. In addition to the instructional support and facilities available in their institutions, instructors need to make the best use of instructional technologies. Furthermore, vicarious experiences should as much as possible be provided to learners by utilizing visits and guest invitation programs.

Hands-on and practical activities need to be the purpose of instruction as much as possible. The instructors may also look into their roles as facilitators, rather than only teachers. They need to design learning activities and tasks that help students explore and investigate knowledge and put into practice what has been theoretically discussed. To evaluate what they have achieved in the courses, Project works and investigative assignments need to be considered as essential instruments for developing their practical competence. And

Stakeholders need to be informed about what is available in their institutions. A review of the inventory of facilities and indexes is a practice that should characterize one of the responsibilities of educational management of higher institution. Stakeholders should also make it a habit to visit to such information sources.

Necessary interventions need to be made for needy students who seek special support. Some issues for interventions include English language support services, adjustment to living and learning conditions of special needs students.

Running forums for sharing stake-holders experiences is a matter that needs to be realized. Through information and experience sharing forums, insights that help enrich teaching- learning effectiveness may be learned from one another.

As mentioned in the findings, student respondents conceptualized readiness on the part of their instructors as effective deliverers of instruction. In this regard, what can be inferred is that teaching-learning effectiveness can be expedited if teachers possess essential thoughts and practice, readiness for changes and flexibility in their behavior. Teachers need to be ready for changes, innovation, and willingness to act positively when their duties demand those challenges. The contents of the lessons, tasks, and activities should relate to the needs, abilities, and interests of learners. Achieving these goals needs motivational activities as well.

Finally, it needs to be held as a principle to actively involve students in the teaching-learning process. This principle calls for the participation of all stakeholders to look for forums and possibilities of participation.

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