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MANAGEMENT ON TEACHING AND LEARNING AT  
UNIVERSITY LEVEL IN LAHORE DISTRICT**

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# ROLE OF THE PRINCIPLES OF TOTAL QUALITY MANAGEMENT ON TEACHING AND LEARNING AT UNIVERSITY LEVEL IN LAHORE DISTRICT

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## ABSTRACT

The purpose of this research was to investigate Role of Principles of Total Quality Management (TQM) on Teaching and Learning (T&L) Process at University Level in Lahore District. The study was descriptive in nature. The objective of the study was to find out prevailing practices in terms of achieving quality education at University level at public and private sector Universities of District Lahore, to improve Teaching and Learning process at University level in the light of information feedback given HEI'S, to find out relationship between Teaching and Learning process and input (Raw Students) and to find out impact of Teaching and Learning process out (Students with Study Skills). The population of the study comprised of students public and private sector Universities District Lahore. The sample comprised of two types of students (Girls & Boys) and one hundred teachers taken through stratified sampling. The research tool TQM questionnaire was used to collect data from teachers and students. TQM questionnaire consist of two questionnaires. One for teachers 40 items while other for students contains 10 items. The researcher visited each University herself for data collection. After data collection, data was analyzed with the help of SPSS 16 by using various statistical techniques, like mean, standardization, correlation and ANNOVA. Research finding reveal that there is a positive correlation between TQM and teaching learning process. The study further portrays that teaching and learning process shows a positive influence in the students study skills. The results of the study reveals that there is a big variation between both gender i.e. males and females in their roles with reference to TQM in teaching and learning process and young teachers shows higher role in TQM in teaching and learning process as compared to old age teachers. The result of the study explains that M.Phil qualified teachers perceive higher role in TQM as compared to other qualification levels and less experienced teachers. Lastly results portray that female student's shows higher role in TQM as compared to male students. The study was beneficial to comprehend the impact of TQM in teaching and learning environment. It was also useful because it presents guidance to increase the use of TQM in education. It also provides recommendations for improvement of TQM in T&L process at university education level.

**Keywords:** Total Quality Management, Teaching and Learning (T&L) Process, Prevailing Practices

## 1. INTRODUCTION

Management is an action of holding oneself as individuals and material properties up to the standards. And a while organizing in this way, one has to deal with time. Conford (2001) states "one has to look at every available resource at one's disposal in its relation with the end goal of whole process". Management should be over hauled for the 21<sup>st</sup> century. It picture as robotic, controlling and assignment situated. We require an idea of management that makes its sustaining strong guidance and formative. This is crucial to isolate the heap in the middle of initiative and management all the more just as. As indicated by (Evens and Lindsay, 2005), "Quality is characterized as meeting or surpassing client desires". This client driven idea of value is utilized as the operational definition for quality inside of this study. The quality in this manner element connected with different elements, for examples, items, managements, individuals, procedures and situations that meet or surpass customer/client desires. Thus a TQM- based instructive association will work at creating frameworks and procedures that fulfill both inner and outer clients/customers desires (Sahney, 2001).

In Pakistan, after establishment of Higher Education Commission in 2002, greater emphasis was on enhancing quality education of Higher Education Institutions. In this regard, HEC established Quality Enhancement Cells (QECs) in all public and private HEIs. It is observed that these QECs played vital role in improving standards of education in these institutions. Keeping in view the model presented by Tong & Han (2003) for the improvements of standards of higher education, a strong relation is observed between prior achievement of students and next institution or organization.

In this model students are input for T&L process at education institutions and they are prepared for jobs to presents themselves before employers in job market, employer give feedback regarding skills and education to the lectures in order to improve the features or attributes of product or students by uplifting T&L process in future. Previous achievements and the prior abilities of the student indicate the potential they bring with them. The

achievements of the students at any point during their educational career are a collective function of the present as well as par resource input pooled by the family, economic status, and peer effects and most important is education system. It is actually the output and net product present before us as a result of the whole previous as well as current input of the resources. The PA provided in a batter way usually produces a much better student accomplishment at the upcoming level. Therefore, its significant input of the resource input while moving towards the subsequent phase of education.

This study originates from the model of Tony & Han (2003) for TQM in education. It is worth mentioning that this model is altered for higher education in Pakistan the proposed model is discussed as under:

In the light of Tony & Hang 2003; following model is presented for the current study. This proposed model encompasses over basic and significant variables including:

1. Educational Institutes (EI- Public and private Universities Certificates),
2. Ministry of Education(Education Ministry-Administratively responsible for EIs),
3. Study skills (Students Personal Approach to Study and learning),
4. Skilled student with study skills (student who acquired skills from educational institutes and is going to pursue his/her educational career in one of HEI's,
5. HEI's are the universities where passed out student of public/private universities get enrolled.

## 2. CONCEPTUAL FRAMWORK

In this model a student is taken as a raw material and it is an input for teaching & learning (T&L) process. This T&L process is being taken place at a university level where an enrolled student is produced as a student with study skills, these students seeks and missions in HEI and get enrolled, here it is suggested that while allowing or rejected admission of students coming from different public and private universities. HEIs should constitute a committee to give information feedback for HEIs via Education Minister as this ministry will enforce the suggested inputs according the requirements. When EIs will execute the SOP's given by the governing ministry the prevailing T&L process of EIs will be uplifted and enhanced particularly after the repeated round of this cycle. It is expected that implementation of this model will execute the principles of TQM on T&L process at private and public universities.

## 3. STATEMENT OF THE PROBLEM

It is observed that students who are intended to enter in the educational career of higher education encounter numerous hurdles which getting adjust in the curricular and co-curricular environment of HEI's. The reason behind these problems is assumed that the students are coming from an educational system which lacks quality. It is seen that HEI's are on the way to achieve quality in education especially after the establishment of HEC in 2002. Whereas private and public universities still don't have any developed infrastructure regarding quality achievement and enhancement at institutional level. Due to this lack students produced by the social educational system cannot compete with the standards of HEI's. Here needs come for a compatible integration between both educational system so that during the process of transfer to HE students could easily adjust there as per international standards being adopted at HEI's of Pakistan.

## 4. OBJECTIVES OF THE STUDY

1. To explore the TQM principles being implemented in teaching and learning practices for achieving quality education at university level.
2. To seek out relationship between TQM and Teaching and Learning process among university students.
3. To find out relationship between TQM & teaching and learning process among university teachers.
4. To find out impact of teaching and learning process on students study skills for contribution in TQM at university level.
5. To find out the role of demographic variation such as age, gender etc. on the TQM in teaching and learning process.
6. To provide recommendation for improving the role of TQM in teaching and learning process of private and public universities.

## 5. HYPOTHESIS

- H1: There is a positive connection between TQM and teaching & learning process.  
H2: There is a significant link between T&L process and raw students  
H3: T&L process shows a positive influence in the students study skills.

H4: There is a big variation between both gender i.e. males and females in their roles with reference to TQM in  
H5: Young teachers shows higher role in TQM in teaching and learning process as compared to old age teachers.

H6: M.Phil qualified teachers perceives higher role in TQM as compared to other qualification levels.

H7: Less experienced teachers show more roles in TQM as compared to more experienced teachers.

## 6. SIGNIFICANCE OF THE STUDENT

The significance of the study is visualized while looking at its various aspects, as it deals in roles of principles of TQM on the performance of the private and public universities at Lahore district, this will lead towards the enhancement of the literature about our topic. According to the practical aspect of it, it is expected that the leaders involved in the university education, education directorates as well as Ministry itself too will cherish Identification of the effect of quality on the principles of public and private universities of Lahore. Consequently, the suggestions and findings will be generalized over the private and public universities of Lahore.

## 7. RATIONALE

Students produced by the education system at university level is not at par to the students of HEI's. It is suggested conducive and compatible investigation between both educational systems so that during the process of transfer from college level to HE students could easily adjust there as per international students being adopted at HEI's of Pakistan. To serve to this problem a model is proposed for implementation in order to get application of TAQM principles at university level. It is anticipated that that implementation of this model will serves as a mechanism of uplifting quality of education being imparted at these educational institutions.

## 8. REVIEW OF LITERATURE

Kotler (1998), another well-known scholar, coined TQM in an approach which strives to improve the over all structure, performance, services as well as products of an organization. Stickled still another scholar gives its definition as TQM is not only a philosophy but also a guiding principle which leads the organizations towards improvement on the regular basis. A list of 16 key principles, but here, all those principles have been divided in three major one's (Atkinson & Naden, 1989). These three include:

- 1) Customer focus
- 2) Team work and participation
- 3) Continuous learning and improvement

Customer focus denotes the modern standards of meeting the customer expectation who is main intended target of all organizational process (Saylor 1992). People participating in the overall process assume their roles and strive for the main goals while the stagnant, passive ones stay aloof from that. A significant part of an organizational process depends upon the contentious learning of all the members and the improvement of the system. Everything is rapidly changing in today's dynamic world and the organizations too need to stay updated for such changes through learning and improvement of their own selves.

### a. MEANING THE CONCEPT OF QUALITY:

Keeping in mind the different definitions of quality, we cannot find a one single, unified definition of quality which may be applicable to all the disciplines. But in education, quality stands for the student learning and satisfaction as well as the value creation from the educational institutes for the ones serving them as well as the ones being served there. While keeping these quality standards in mind, teaching and learning process can be improved to the considerable extent (Djerdjour & Patel, 2000).

### b. MAJOR PHILOSOPHIES OF TOTAL QUQLITY MANAGEMENET

This process should not be limited only to the senior authorities or the decision makers of the organization but everyone from the highest point to the lowest in the system should be in line with the largest quality standards (Saylor, 1992).

## ORIGINS

The origin of the idea of quality management may be the brain-child of a single person but it is the end result of a long, old person where almost every organization worked upon it and also named it as it suited them. Some of the names given to it include total quality management, continuous quality improvement, total quality control and statistical quality control. However, there are obviously some differences among these as per the different key word included in the names while keeping in mind the various quality standards (Zaire, 19996).

## JURAN'S CONTRIBUTIONS:

**Juran travelled in 1950. He mainly emphasized the elements the planning controlling and organizing others centers of his focus where** technical spect of management as well as customer satisfaction. He had also depicted the similar ideas in his more than dozen books also stood at best seller stands (Juran, 19191).

## CROSBY'S CONTRIBUTION

**Philip Crosby, a famous scholar laid the foundation of "Quality College" in Florida. His emphasis was to meet the customer** demands not its making corrections but by putting the focus upon preventions. According to Crosby (1992), round 20% of the finances are consumed by poor quality the cost which can be avoided but taking good quality measures. "Zero Defects" was his slogan. Some of the projections he made were:

1. Quality is not defined as goodness but a fulfillment of the requirements.
2. Not appraisal but prevention is the system required for the achievement of the quality.
3. Standards of the performance are not being closed to zero defects but absolutely zero defects in its real sense.

Crosby does not bank upon the problem solving techniques are the statistical problem used by Deming to form of his own method. He consider quality to be free because, according to him, the cost of prevention of quality concerns will never go high as compare to the detection and correction cost or even the failure of the same. Crosby presented 14 points in this regard.

The 14 points are:

1. Commitment management i.e. every individual from top to bottom in the company should be committed and convinced towards the company goals.
2. The heads of departments should make a quality improvement team which should look over the improvements.
3. Quality should be measured for each and every activity in the process.
4. The estimate of the quality cost should be kept in its relation with the identification of improvement areas.
5. All the employers should be made aware of the quality standards.
6. Tangible action should be taken towards correction and improvement.
7. "Zero Defect" should be planned.
8. Supervisor should be trained for the implementation of quality standards.
9. Management toward the goal of zero defect should be scheduled.
10. Every individual should also have a set of goals.
11. The cause of error should be removed by communication of the problems faced by the employers to the higher management.
12. Recognition should be non-financial, given to the one's meeting goals.
13. Quality assurance team should conduct meeting on regular basis.
14. All above steps should be regularly repeated without intervals.

## PRINCIPLES OF TOTAL QUALITY MANAGEMENT

**According to the Deeming (2002), there is also detected list of general expectations one want to see in an organization** which has executed 8 quality management principles and which is very significant to be understood.

- (1) Customer centered association
- (2) Leadership
- (3) Involvement of individuals
- (4) Process Approach
- (5) Systematic way to deal with administration
- (6) Realistic way to make choices
- (7) Mutually advantageous supplier connections

**UTILIZING THE EIGHT TOTAL QUALITY MANAGEMENT****STANDARD**

1. Where is the client center in the procedure?
2. Where in these procedures arrive, initiatives controlling approaches, qualifiable targets and the environments that persuade the workforce accomplish these goals?
3. Where in this procedure is the association of individuals in the outline of procedure, the setting on of choices, the checking and estimation of execution and the change of execution?
4. Where is the procedure has procedure methodology been conducted to the achievements of these destinations?
5. Where this procedure is the framework may to deal with the administration of the interfering procedures, the improvements of the execution, the end of the bottlenecks?
6. Where in the procedure are the realities gathered and transmitted to the leaders?
7. Where this procedure is arrives constant change in execution, proficiency and adequacy?
8. Where in this procedure arrives a commonly advantageous association with suppliers?

**FACTORS OF TOTAL QUALITY MANAGEMENT IN EDUCATION**

- (1) Strategic and leadership management
- (2) Student academic and staff requirements
- (3) Syllabus/Curriculum
- (4) Research/Teaching
- (5) Pedagogy
- (6) Learning and research support
- (7) Academic achievement
- (8) Students' progress, success and satisfaction
- (9) School/Universities achievements
- (10) Innovation and change management

**9. MATERIALS AND METHODS**

**The purpose** of the study was to investigate the role of principles of Total Quality management on teaching and learning process at university level in Lahore district, this chapter included all the procedures and methodology the method used to conduct the study.

The population and the sample is explain in detail along with the detail of instruments which were used for the collection of data.

**10. RESEARCH DESIGN**

The design of this study is descriptive Questionnaire were administered which focused total quality management on teaching and learning process of university level. The present study provided quality "The Role of the Total Quality Management on Teaching and Learning Process at University Level".

**a. POPULATION**

"Population is a collection of all the elements, the researcher are studying and about which they are trying to draw conclusions (Levin and Rubin, 2000, Best and Khan, 1999). All the students of private and public universities in Lahore district constituted the population of the study. The population was defined at two levels. For the first level the institutions that formed population of the study at university level. At the second level, the populations were the Head of departments and teachers of all institutions. There were three hundred and twenty (320) total universities in Lahore district. In which two hundred and sixty nine (269) private universities from which one hundred and nine (109) university boys and one hundred sixty eight (168) were university girls and at public sector 51 universities form which twenty two (22) boys and twenty nine (29) university girls.

**b. DELIMITATION OF THE STUDY**

Delimitations of the study were as:

- (1) Educational institutions have many aspects and activities to study but the study were focus on the core activities i.e. teaching and learning process.

(2) Time and financial constraints.

#### c. SAMPLE

Sample is the collection of some, but not all of the elements of the population under study, used to describe the population (Levin & Rubin, 2000). Public and private institutions are administered by Ministry of Education. Institution sampled for the study was balanced to represent institution for girls and boys. In the sample representation of boys and girls institution public and private sectors. Among the population of the study (320) institutions were selected from district Lahore. The universities Head of the departments were 20, 200 teachers were required for gathering data from public and private sectors universities, 100 from each university. Stratified systematic sampling technique is used for this study.

#### d. INSTRUMENTS

The research study used questionnaire as a research instrument for data collection. "It gives respondents a sense of privacy and is more adequate situations in which respondents have to check information and give more valid data" (Miller, 1991).

The following two types of questionnaires have been developed:

1. Questionnaire for university students
2. Questionnaire for university teachers

#### e. PILOT TESTING OF THE STUDY

Before collecting data through the questionnaire, it has to be pre tested. Pretesting of research questionnaire using pilot test was conducted to check whether the research questionnaire is according to the consistent scientific basis or not, and to verify the degree to which it meets the research objectives and to recognize any deficiency in the questionnaire. The research questionnaire was tested on 30 respondents in order to check accuracy and validity of research construct or further study.

**TABLE: RELIABILITY OF IMPACT OF TQM**

SR. NO	RESEARCH VARIABLES	CRONBACH ALPHA
1.	Input	0.82
2.	Teaching Learning	0.89
3.	Process of University	0.73
4.	Monitoring Wing of Ministry of Education	0.86
5.	Feedback	0.81
6.	Policy and Revision	0.82
7.	Student Intake	0.76
8.	Teaching and Learning Process in University	0.84
9.	Study Skill	0.90
10.	Feedback	0.78

It clearly portrays that all research variables have internal consistency to measure role of TQM in teaching and learning process.

#### f. DATA COLLECTION

In order to collect data from the teachers and students through the instruments, the researcher visited the sample university personally. The two tools of data collection were personally administered during university hours. Researcher properly guided all selected respondents and also told them that information was being collected from research purpose, and their responses would not be told to ever one.

#### g. ANALYSIS OF DATA

A data analysis statistically method is dependent on the rationale of research study (Malhatra, 1999). Various researchers used statistically techniques like correlation and regression analysis for data analysis. The



researcher has used SPSS 16 software for computing relevant tests to these factors to evaluate their relationships. The correlation analysis was computed to find out Pearson Correlation and Significance (2-tailed) of the various elements of research studies factors. Then researcher did the regression model, that includes model summary in which and R Squarer were calculated. Then with the help of ANOVA, the researcher calculated DF, Sig, F, and Mean Squire. Finally, standardizes coefficient Beta, T-test and significance of factors were calculated.

#### h. VALIDITY OF RESEARCH CONSTRUCTS

In conducting research study, accuracy is connected to the term "Validity" (Hair, 2007).

"The extent to which a construct measures what it is intended to measure is called "Validity "No measurement error takes place when the researcher construct has perfect validity (Hair, 2007). To guarantee the validity of research study the approaches revealed below have been embraced. In order to check the criterion validity of research instruments, spearman correlation of confident was computed. To test validity of questionnaire structure, spearman test find out correction between one item and whole item of questionnaire. The mentioned test is performed in the next descriptions.

### 11. RESULTS AND DISCUSSION

This stage of research contains analysis and interpretation of the data. The data for investigating the research problem were collected through questionnaire for teachers and students of public and private universities. The collected data were analysis through percentage, mean, chi-squire and person correlation. Data was analyzed by descriptive statistics and inferential statistics to examine the results such mean, standard deviation, correlation and ANOVA.

#### DATA ANALYSIS

Correlation is a statistical tool to measure the strength of relationship/association between two quantities. It is denoted by "r". The correlation coefficients value should range between +1 and -1.

The positive sign indicates unidirectional while negative signs show oppositional change. If taken square of the "r" can also enlighten the variance in one another (Skaran, 2003; Levin& Rubib, 2006). According to De Vaus (2002), Person's correlation coefficient "r" defined criterion as weak/low correlation if  $r \geq 0.29$ , moderate/medium correlation if  $0.30 < r < 0.49$ ; large/high correlation if  $0.50 < r < 0.69$  and strong/highest correlation if  $r \geq 0.70$ . In order to measure the interrelationship between TQM construct variables based on the perception of university teachers, inter scale correlation was computed.

In order to test correlation among sub scales of TQM of teachers. Pearson correlation coefficient was computed. The correlation in the table no 2 universities teachers on total quality management questionnaire with total and its subscales of TQM and significant correlation between subscales. From the results in table, its emerges that there was strong positive correlation between subscales of TQM and significant correlation with total scales. The table 1 portrays that all subscales of TQM. The highest correlation exists between monitoring wing and input (.781\*\*), monitoring wing of ministry of education an T/L process in university (.766\*\*), policy and revision and input (.646\*\*), policy and revision a (.674\*\*) and lowest correlation exists (.213\*\*). The value of correlation on total scales between TQM and teaching learning of university scores is .949\*\*.

Table 3 shows inter scale correlation of university student scores on TQM questionnaire with total and its subscales, from the results in table, it emerges that there was positive correlation between subscales of TQM and significant correlation with total scale of TQM. The highest correlation exists between teaching and learning process of university and study skill (.680\*\*) whereas mild correlation exists between teaching and learning process and student intake (.510\*\*), feedback and teaching learning process (.4767\*\*), while lowest correlation exists between feedback and student intake (307\*\*), study skill and student intake (.394\*\*), feedback and study skill. The value of correlation on total scales ranges from .532\*\* to .910\*\*. The strongest positive correlation among total scales between TQM and study skill of university (.910\*\*).

**TABLE 1:**

Inter scale correlation among sub scales of TQM:

SUBSCALES OF TQM	1	2	3	4	5
INPUT	1				
TEACHING LEARNING PROCESS OF	.781**	1			

UNIVERSITY				
MONITORING WING OF MINISTRY OF EDUCATION	.597**	.766**	1	
FEEDBACK	.213**	.325**	.359**	1
POLICY AND REVISION	.548**	.646**	.674**	.452** 1
TOTALS	.811**	.814**	.949**	.869** .448**

**TABLE 2:**

Inter scale correlation among subscales of TQM:

SUBSCALES	1	2	3	4
STUDENT INTAKE	1			
TEACHING/LEARNING PROCESS IN UNIVERSITY	.510**			
STUDY SKILL	.394**	.680**	1	
FEEDBACK	.307**	.476**	.343**	1
	.614**	.890**	.910**	
	.532**			

**TABLE 3:**

Correlation between students and teachers:

CORRELATION STUDENTS	TEACHERS 0.63**
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**TABLE 4:**

Impact of teacher's quality on teaching and learning process:

Sr No	Statements	Mean	SD	Correlation
1.	Students are viewed as the most important customers in the university	3.56	0.89	.611**
2.	Student intake criterion is followed strictly in the university	3.23	0.81	.562**
3.	Effective implementation of students intake criteria give smooth input for class strength	3.67	0.90	.562**
4.	Meaning diverse level of student knowledge is a challenge in public & private universities	3.67	0.75	.509**
5.	Financial support for poor but talented students available	3.45	0.75	.629**
6.	Introductory orientation is given to the staff about syllabus at the start of session	3.29	0.88	.655**
7.	Refreshers are arranged for staff about syllabus for learning new			

	things	3.55	0.89	.602**
8.	Amis objectives & learning outcomes of the curriculum are understood by the staff	3.24	0.81	.597**
9.	Syllabus is reviewed & compare with other institution for quality	3.56	0.89	.599**
10.	Objectives of curriculum regarding skills to be important are identified in advance	2.67	0.72	.603**
11.	Students are intended about the learning of the syllabus initially	3.79	1.036	.597**
12.	Lesson plans & planners are well prepared in advance	4.39	.714	.591**
13.	Units of syllabus are completed as per plan on time	4.50	.686	.639**
14.	Activities are incorporated in syllabus for better learning of students	4.41	.772	.628**
15.	Curriculum is evaluated focusing learning level of students	4.33	.871	.598**
16.	Syllabus is blended by activity based learning as per requirements	4.38	.745	.583**
17.	The environmental conditions that school offers are sufficient in terms of quality to the students	4.26	.761	.583**
18.	The equipment, facilities & materials that school offers are sufficient in terms of quality to the students	4.30	.940	.590**
19.	The students have opportunities for curricular activities	4.37	.757	.497**
20.	A staff development & training program exist for academic staff	4.56	.636	.460**
21.	Sufficient health services are available at the campus	4.34	.835	.499**
22.	Sufficient emergency services are available at the campus	4.44	.731	.494**
23.	A system for taking staff views exists at the university	4.27	.837	.490**
24.	There is a system of taking the parents views to improve quality	4.28	.862	.570**
25.	Academic programs are monitored by ministry for quality	4.33	.871	.565**
26.	Administrative support services are monitored by ministry for quality	4.38	.745	.558**
27.	There is an appraisal & peer			

	review of staff, including teaching skills	4.26	.761	.601**
28.	Teachers have sufficient opportunities for progressive development of other teaching skills	4.30	.940	.542**
29.	There are sufficient arrangements for future counseling of students	4.24	.820	.562**
30.	Course & curriculum evaluation is carried out by the ministry periodically	4.37	.755	.535**
31.	The parents provide feedback on the quality of teaching	4.38	.800	.458**
32.	Feedback on the processes & procedure of the institution is received from the teachers and parents	4.34	.750	.317**
33.	Management has a clear vision for strategic planning & decision making	4.53	.673	.433**
34.	Surveys are conducted to identify the needs of the students / staff / employer & parents	4.38	.712	.514**
35.	There are chances of promotion for the teachers from one to another	3.60	1.350	.490**
36.	Upward mobility of the teachers is fair & merit based	4.24	.767	.500**
37.	Award is given to groups / team rather than individuals to inculcate team spirit	4.37	.757	.613**
38.	The institution processes & procedures are compared with the best institutions for benchmarking	4.56	.646	.341**
39.	Management has a clear vision & ample strategic planning & decision making	4.34	.835	.532**
40.	Managing diverse level of student's knowledge is a challenge in government university	3.79	1.036	.634**

**TABLE 5:**

Impact of total quality management in teaching & learning process among students:

SERIAL NUMBER	RESEARCH STATEMENT	MEAN	SD	Correlation
	We get admission in the			

1.	university very easily	3.45	1.295	.386**
2.	There is the difficult entry list to pass for getting admission in university	3.45	1.040	.292**
3.	We feel that our university gives us more importance	3.35	1.145	.610**
4.	Brilliant students get the assistant in the university	2.58	1.107	.444**
5.	Position holder students are given appreciation & cash awards	2.62	.987	.494**
6.	Teachers focus on weak students in class	2.84	1.174	.676**
7.	Teacher gives us reference material & extra notes in addition to syllabus books	3.14	1.279	.493**
8.	We know the learning outcomes for our students	3.52	1.099	.472**
9.	Teachers covers the course on time	3.26	1.219	.484**
10.	Teachers teach us by doing activities of different concepts	3.40	1.083	.507**
11.	University environment is good & pleasant	2.84	1.256	.573**
12.	Furniture is sufficient in the classrooms	3.64	1.100	.554**
13.	University organized extracurricular activities on different occasions	3.70	.982	.641**
14.	Classrooms are airy & sufficient space	3.49	.1.098	.506**
15.	Sports facilities & play grounds exist in university	2.71	1.211	.527**
16.	Universities arranges regular parents meetings	3.11	1.088	.637**
17.	Head of departments & teachers guide those students who faced study difficulties	2.79	1.125	.572**
18.	Feedback from parents is given importance in university	3.30	1.194	.525**

**TABLE 6:**

Descriptive analysis of TQM:

ITEMS	MEAN	SD	Std. Error Mean
Input	11.8400	4.65088	.46509
T/L process	44.7500	12.95164	1.29516
MOE	22.1500	6.25934	.62274
Feedback	5.4200	2.5077	.20508
Policy	21.2600	6.22738	.62274
Total	105.4200	27.48192	2.74819

**TABLE 7:**

Dimension of TQM:

VARIABLES	MEAN	SD	STD.ERROR MEAN
Students intake	6.0900	2.11762	.14974
T/L process	14.2800	4.56352	.32269
Study skill	17.8050	6.60721	.46720
Feedback	2.4550	1.34425	.09505
Total	40.6300	12.09024	.85491

**TABLE 8:**

Comparison of mean and standard deviation of university teachers on TQM for Variable "Gender":

GENDER				
Subscales of TQM	Male n=66		Female n=34	
	M	SD	M	SD
Input	11.15	3.8	13.17	5.7
T/L process	43.62	11.0	46.94	15.9
MOE	21.54	5.4	23.32	7.5
Feedback	5.34	2.0	5.55	2.1
Policy & revision	21.16	5.6	21.44	7.2
Total	102.83	22.5	110.44	35.0

**TABLE 9:**

Comparison of Mean and SD of university teachers on TQM for variable "Age":

AGE						
Subscales of TQM	25-35 years (n=23)		36-45 years (n=56)		46-55 years (n=21)	
	M	SD	M	SD	M	SD
Input	13.00	5.6	11.12	4.0		4.8
T/L process of university	11.12	4.0	42.76	12.5	12.47	10.6
MOE	25.08	7.1	20.92	5.7	46.9	5.6
Feedback	5.39	2.2	5.51	1.9	22.19	
Policy & revision	23.30	6.3	20.39	6.0		2.2

Total	114.3	32.0	110.7	26.1	5.19	6.4 23.7
					21.33	
					108.0	

**TABLE 10:**

Comparison of Mean and SD of university teachers on TQM for Variable "Qualification":

QUALIFICATION						
Subs scale of TQM	MASTERS (n=85)		M.PHIL (n=12)		PHD (n=3)	
	M	SD	M	SD	M	SD
Input	11.75	4.4	12.83	6.1	10.33	30.
T/L process of university	44.52	12.7	42.75	14.3	39.00	16.0
MOE	22.09	5.9	22.83	8.3	21.00	57.8
Feedback	5.36	1.9	5.83	12.4	5.33	3.2
Policy & revision	21.51	21.51	21.00	7.8	15.00	2.6
Total	105.25	26.3	110.235	34.9	90.66	32.3

**TABLE**

Comparison of Mean &amp; SD of university teachers on TQM for variable "Experience":

11:

EXPERIENCE						
Subs scale of TQM	1-5 (n=17)		6-10L (n= 38)		7-11 (n=45)	
	M	SD	M	SD	M	SD
Input	5.7.	2.1	3.2	1.4	2.8	1.7
T/L process of university	14.58	5.7	11.15	4.7	11.37	3.7
MOE	52.83	15.5	44.42	14.1	41.97	9.3
Feedback	24.64	8.3	22.42	6.4	20.97	4.8
Policy & revision	5.70	2.1	5.26	1.8	5.26	5.70
Total	22.35	7.6	20.97	6.0	21.08	5.8

**TABLE 12:**

Comparison of Mean &amp; SD of university teachers on TQM for variable "Designation":

DESIGNATION								
Subs scale of TQM	VISITING LECTURER (n=17)		LECTURER (n= 39)		AP (n=20)		PROFESSOR (n=24)	
	M	SD	M	SD	M	SD	M	SD
Input	10.82	3.1	12.28	4.4	11.00	4.5	12.54	5.8
T/L process of university	45.76	11.2	46.05	11.7	42.40	14.3	43.87	14.9
MOE	23.17	3.3	21.58	5.7	22.30	6.7	22.20	8.2
Feedback	5.52	1.6	5.30	2.1	5.85	2.3	50.16	1.9
Policy & revision	20.82	5.3	20.00	5.7	20.80	7.0	20.75	7.0
Total	106.11	19.3	107.23	24.6	102.35	20.8	104.54	33.6

**TABLE 13:**

Comparison of Mean &amp; SD of university teachers on TQM for variable "Gender":

Subscales	GENDER			
	Male (n=94)		Female (n=58)	
Items	M	SD	M	SD
Student Intake	6.89	2.0	5.37	1.9
T/L process of university	15.22	4.2	13.44	4.7
Study skill	20.26	7.1	15.62	5.1
Feedback	2.70	1.3	2.23	1.3
Total	45.8	11.89	36.67	10.8

**TABLE 14:**

Comparison of Mean &amp; SD of university teachers on TQM for variable "Age":

Subscales	AGE			
	20-25 (n=142)		26-30 (n=58)	
Items	M	SD	M	SD
Student Intake	13.00	2.0	11.12	4.0
T/L process of university	11.12	4.2	42.76	12.5
Study skill	5.39	7.1	5.51	1.9
Policy & revision	23.30	1.3	20.39	6.0
Total	114.3	32.0	110.7	26.1



**TABLE 15:**

Comparison of Mean &amp; SD of university teachers on TQM for variable "Class":

CLASS				
Subscales	20-25 (n=142)		26-30 (n=58)	
	M	SD	M	SD
Items				
Student Intake	5.88	2.2	6.19	2.0
T/L process of university	12.42	4.1	15.25	4.9
Study skill	14.42	4.8	19.58	6.7
Feedback	2.21	1.2	2.58	1.35
Total	34.94	10.0	43.62	12.0

**TABLE 16:**

Normality Analysis of TQM in teaching and learning

Subscales	Knowledge-smirov			Shapiro-wilk		
	Statistic	DF	Sig	Statistic	DF	Sig
TQM teachers	.189	99	0.19	.642	99	0.07
TQM students	.281	199	.234	.430	199	0.10

TABLE 17:

Regression Analysis of Impact of TQM in Teaching &amp; Learning of Process among Students:

	Unstandardized coefficient		Unstandardized coefficient	t	Sig	VIF	Tolerance
	B	Std. Error	Beta				
(Construct)	3.073	.754		4.076	.000		
Student intake	.494	.112	.229	4.419	.000	2.01	0.98
Study skill	.352	.036	.510	9.700	.000	1.78	0.82
Feedback	.782	.172	.231	4.546	.000	1.01	0.78

TABLE 18:

Coefficient of Determination:

R	Square	Adjusted R Square	Std Error of the Estimation
.756	.572	.565	3.00930

TABLE 19:

ANOVA of the Impact of TQM I teaching &amp; learning among students:

Model	Sum of Squares	Df	Mean square	F	Sig
Regression	2369.370	3	789.790	87.213	.000
Residual	1774.950	196	9.056		
Total	4144.320	199			

TABLE 20:

Regression analysis of impact of TQM on T/L among teachers:

Model	Un standardized coefficient	Std Error	Standardized Coefficient	t	Sig	VIF	Tolerance
	B		Beta				
(Construct)	5.029	2.680		1.877	.064		
Input	1.340	.182	.481	7.374	.000	1.11	.990
MoE	.831	.153	.402	5.428	.000	1.01	.064

Feedback	.220	.360	.035	.610	.543	1.95	.921
Policy	.200	.096	.096	1.293	.194	1.45	.898

TABLE 21:

Coefficient of Determination of teachers:

R	R Square	Adjusted R Square	Std Error of the Estimate
.870	.757	.747	6.51418

TABLE 22:

One way of Anova of Impact of TQM on Teachers:

Model	Some of Squares	DF	Mean Squares	F	Sig
Regression	12575.466	4	3143.867	74.087	.000
Residual	4031.284	95	42.435		
Total	16606.750	99			

## 12. FINDINGS

- When responses from head of the departments obtained regarding students are viewed as the most important customers in the universities, there was a difference of opinion in the views of head of departments and students. However there was not a visible difference of opinion in the teachers and head of departments. Teachers had views that gives importance to the students are treat them as a stakeholder of education setup, whereas does not feel that they have been given due importance.
- As per views of the head of departments regarding students, intake criterion, it is followed strictly in this university in order to keep the quality of education. Teachers disclosed that intake criterion in their universities in on merit.
- While taking views from teachers it was added from teachers it was added in the findings that effective implementation of students intake criteria gives smooth input for class strength.
- Head of departments were satisfied with the view that managing diverse level of students' knowledge is a challenge in public and private universities. Teachers also agreed that they face challenge in managing the diverse level of students' knowledge in their universities.
- After evaluation of information regarding financial support for poor but talented students, it is informed that head of departments give importance to the matter of financial support for poor but talented students but they also find less support from the authorities.
- As per views from head of departments it is informed that management of university gives introductory orientation to the staff about syllabus at the start of session for smooth delivery of knowledge. Teachers from different universities were not satisfied for this procedure as they take self-measures for managing the syllabus and planners in order to have effective teaching.
- Results indicate that head of departments arrange are allow teachers to participate in refreshers arranged in house or in the other teachers about syllabus for learning new things.
- In the findings of the study it was disclosed by the view head of departments that they have effectively communicated aims, objectives and learning outcomes of the curriculum to the staff and they have understood it. On the other hand teachers do not receive ant support from the management and they do themselves.
- Few of the head of departments communicated that national education bodies review the syllabus and compared with other institutions for quality but most of them were not satisfied with the least contribution of the authorities in syllabus improvements.
- According to the views of head of departments and teachers, it is disclosed that the students are not actively intending about timely integration of objectives of curriculum regarding skills.
- In the findings of the study it comes into the knowledge that head of departments and teachers were not satisfied about the learning outcomes of the syllabus.

12. As per opinion of teachers lesson plans and planners are well prepared in the advance whereas head of departments are not satisfied with in the time preparation of lesson plans and planners.
13. While taking opinion from head of departments about units of syllabus that either there are completed as per plan on time, they disclosed that their teachers having different view stated that they mostly complete the units of syllabus in the given time.
14. As per views of head of departments, activities are incorporated in syllabus for better learning of students. However teachers were not satisfied with the opinion due to the time constraints.
15. Both teachers and head of departments are not satisfied with the evaluation process of curriculum focusing learning level of students.
16. While taking views about blend of activities based on learning in syllabus as per requirements, it is informed that few head of departments found satisfied whereas most of the head of departments and teachers were found dissatisfied with the blended of activity based learning in learning as per specific requirements.
17. In the views head of departments the environmental conditions that university offers are sufficient In terms of quality to the students. Most of the teachers did not agree with the environmental conditions offered by the university in terms of quality to the students.
18. In responses from head of departments it is received that the equipment, facilities and materials that university offers are sufficient in terms of quality to the students. Teachers of public and private universities are not satisfied with the opinion.
19. After evaluating information gathered from the respondents it is disclosed it is disclosed that head of departments of the university are of the opinion that the students have opportunities for the curricular activities.
20. As per collected data from teachers and head of departments it is not satisfied with the staff development and training program for academic staff. Head of departments have satisfaction about the availability of staff development and training program for academic staff at university level.
21. Teachers are not satisfied with availability of sufficient health services are available at the campus, whereas head of departments showed neutral level of satisfaction about this matter.
22. In most of the universities and head of departments are not satisfied with the sufficient emergency services are available at the campus. Heads of department were of the view that there is a system for taking staff's views that exists at the university but staff was not satisfied with the system of taking views from them.
23. In the evaluated date it is clear that both heads and teachers are satisfied with system of taking the parents view of improve quality.
24. When evaluated the information taken from head teachers most of the respondents were not satisfied with the monitory process of academic programs by ministry for quality.
25. Head teachers showed their concern about the administration support services to be monitored by ministry of quality.
26. When received responses from the teachers and head of departments about having sufficient opportunities for the progressive development of their teaching skills, there is a difference in level of satisfaction in both teachers and head of departments.
27. In the data collection from the respondent's head of departments and teachers were not satisfied from the appraisal and peer view of staff, including teaching skills.
28. In the data received from the both respondents head teachers and teachers it is shown that both respondents are not satisfied with the availability of sufficient arrangements for future counseling of students.  
Head of departments and teachers of the public and private universities are not satisfied with the procedure of course and curriculum evaluation by the ministry periodically.

29. When evaluated the information from the head of departments and teachers received this come up to the knowledge that parents do not any provide feedback on the quality of teaching.
30. Head of departments showed low level of satisfaction about the feedback on the institution from the teachers and parents.
31. Head of departments showed great level of satisfaction about the clarity of vision for strategic planning and decision making but the teachers seems less satisfied.
32. Teachers and head of departments were not satisfied with the procedure of surveys conducted to identify the needs of the students/staff employees and parents.
33. Head of departments and teachers shows less satisfaction about the chances of promotion for the teachers from scale to another.
34. While taking views about the upward mobility of the teachers is fair or not and merit based or not teachers showed less satisfaction in comparison with the head of departments.
35. About the award or rewards teachers and head of departments showed less satisfaction that there awards are given to group/team rather than individuals to inculcate team spirit.
36. While taking opinions about the benchmarking that institutions processes and procedures are compared with the best institutions, both teachers and head of departments showed very low level of satisfaction.

### 13. DISCUSSION

Keeping in view the above findings of the study following discussion have been made where findings of the current study where co-related to the previous studies done in this area. Teachers and head of departments that students are given importance and being treated as a stakeholder of education setup, whereas students do not feel that they have given due importance. In the successful quality education setup there should be a balanced system in which students teachers and management must be involved and given due importance for uplift of quality in education ( Brundiers, k., & wiek, A, 2011). Teacher's beliefs about their students are important as it implies students to be good achiever or low achievers depend upon the feedback provided by the teacher (Franklin, 1989). Quality of education relies upon being taught, syllabus/ curriculum, in educational institutions; on the other hand other factor is more important than a quality syllabus/ curriculum which quality teaching. In current study findings revolve around various factors. These factors can be described as teachers high expectations (Edwards, 1979), curriculum (Adams and Bingh, 1998; Irvin, 1990), teaching methodology (Franklin, 1989), classroom environment, disciplinary practices (Irvine, 1990), conflict resolution strategies, communication process and teachers personality (Landson-Bilings, 1994). It is observed that students with high abilities perform well than students with low abilities. "Teachers with less experienced generally teach students in the low ability groups (Braddock 11, 1995).Further more study skills that learned in M.Phil should be resistant in PHD university students.

### 14. SUMMARY

As per literature cited in the current study when a student is taken as a raw material and it is an input for teaching and learning process. This teaching and learning process is being taken place at university level where an enrolled student with study skills, these students seeks admissions in HEI,S and get enrolled, Here it is suggested that while allowing or rejected admission of students coming from different universities HEI,S should constitutes a committee to give information feedback for HEI,S via education ministry as this ministry will execute the sop's given by governing ministry, the providing T&L process of the EI,S will be uplifted and enhanced particularly after a repeated rounds of this cycle. It is expected that implementation of this model will be execute the principles of TQM on Teaching & Learning process at university.

The objectives of the study were to explore the TQM principles being implemented in teaching and learning practices for achieving quality education at university level. It is aimed to seek out relationship between TQM and teaching learning process among university students. The study aimed to find out relationship between TQM and T/L process among university teachers. It also attempted to find out impact of teaching and learning process on students study skills for contributing in TQM at university level. Is there any role of demographic variation such as age, gender etc. on the TQM in teaching and learning process?

Researcher provides recommendations for improving the role of TQM in teaching and learning process of universities.

As per results of the study all the respondents showed less satisfaction about the implementation of teaching and learning practices for achieving quality education at university level. It is seen that there is a strong relationship in the TQM in teaching and learning process among university teachers and students as well. Teachers and head of departments participated in this study and they acknowledged the impact teaching and learning process on students study skills for contributing in TQM at university level. There is a greatest role of demographic variation such as age, gender, in maintaining quality at university level teachers have to work hard for addressing issue in this regard.

## 15. CONCLUSION

In the light of statistical analysis and findings of the study, the following conclusions were drawn.

1. Teachers give importance to the students and treat them as stakeholder of education setup, whereas students do not feel that they have been given the due importance.
2. Keeping in view the implementation of quality model head of departments give importance to student's intake criterion, they follow strictly in the university in order to keep the quality of education. As a result of implementation of students intake criteria teachers admit the effective results in class strength.
3. Managing diverse level of students' knowledge is a challenge in public and private universities.
4. In public and private universities financial support for poor but talented students is given importance but they find less support from the authorities.
5. Management at university gives introductory orientation to the staff about syllabus at the start of session for smooth delivery of knowledge. Whereas teachers are not satisfied with the effectiveness and the frequency session.
6. Head of departments are reluctant to allow their teachers to participate in refreshers arranged in house or in other universities about syllabus for learning new things.
7. Head of departments at their own about the importance of orientation to be given to the teachers are not getting effective orientation at their end.
8. National educational bodies are not effectively participating in review of the syllabus for improvements. There is no timely integration of objectives of curriculum regarding improvements of skills. Evaluation process of curriculum focusing learning level of students is also not satisfactory.
9. Teachers need to prepare lesson plans and planners in advance and units of syllabus are not completed as per plan on time.
10. Ample time is not given for incorporation of activities in syllabus for better learning of students; however teachers were not satisfied with the opinion due to time constraints.
11. To improve quality of education environmental conditions and health services that university offers are not sufficient. Equipment, facilities and materials that university offers are not sufficient in terms of quality to the students.
12. Staff development and training program for academic staff are not well prepared and well planned.
13. As the feedback is important factor of quality education and it was not given importance for taking staff's and parents views as a feedback.
14. Monitoring process of academic programs by ministry of quality is not satisfactory and administrative support services to be monitored by ministry for quality.
15. Appraisal and peer review of staff, including teaching skills by the ministry is not satisfying and needs improvements.
16. There are no sufficient arrangements for future counseling of students.
17. Dissimilar to the need teachers are not satisfied about the quality of vision for strategic planning and decision making by the management of universities.
18. Reward policy, upward mobility, and promotion policies are not well described at public and private universities.
19. Bench marking of the institutions for comparing process and procedures with the best institutions is not encouraged at these universities.

## 16. RECOMMENDATIONS

On the basis of present research study there are some recommendations, which can improve the desirable quality of education at university level.

- (1) Students are the main stakeholders of the education system and they are mainly affected by the low or high level of quality of education at university. It is recommended that they should begin importance with the acknowledgement that they are the key role player in the quality uplift at the universities. Furthermore, criteria for the admissions of new students must be followed strictly in ordered to have standards lot of

students in every batch. This will affect the class room management by the teacher having balanced knowledge level of student in one class. There is a need to constitute welfare and is a need to constitute welfare and students affairs committees under the supervision of head of the departments of universities to execute framework of financial assistance. Funds of the financial assistance could be raised from different avenues including regarding education ministry, industry, business and commerce industry, philanthropists and community welfare organizations. Financial support for the needy but talented students must be given after developing and signing agreements with the mentioned quarters and may be requested as per standard operating procedures, so that the talented students could play contributory role in enhancing quality at a university level. In order to cater for the psychological matters of students that there is need to establishment of student counseling system under the supervision of financial cover of ministry of education. So that the students could be given exposure of their feelings and skills.

- (2) Teachers of the public universities require orientation about syllabus, whereas teachers having long term tenure should be offered refreshers for learning upcoming knowledge regarding lesson planning and curriculum management. Once aims, objectives and learning outcomes of the curriculum are understood by the teachers they would deliver quality knowledge. All these initiatives should be taken by head of the departments and the proposed for the staff development could be forwarded to the relevant ministry of different non-government organizations.
- (3) Curriculum committees at national and local level should review and compare syllabus, it will impart quality when lesson plans and planners are up to date. Lesson planning for timely completion of syllabus, curriculum review for incorporating better learning for students imparts better learning and teaching procedures in delivery of quality education.
- (4) Experimental conditions facilities like play grounds, labs, health services and material that university offers are not sufficient in terms of quality, however there should be sufficient enough so that it could contribute in quality education.
- (5) There must be a staff development and training program, award and reward policy and promotion policy on merit for academic staff. Ministry of education should be focus on these matters and develop long term plan for action. Academic staff having satisfied moral always pay back contributes in implementation of quality measure in education.
- (6) For better development of quality systems at university level feedback procedures taking inputs from teachers, students and parents plays imparted role, there for every stakeholder must be taken on board for having healthy feedback for improvement.
- (7) Ministry of education has a regulatory role in implementation of quality frameworks at university level, there is a dare need from ministry of education to take part in reviewing curriculums, academic programs, and monitoring support services.
- (8) A management level of university clarity of vision, mission and objectives always give tremendous role in developing TQM frameworks at university level. Management should benchmark their procedures and process by comparing with best institution's so that deficiencies and lack in the system should be eradicated.

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