



RESEARCH PAPER

**Managerial versus Infrastructural Quality of Teacher Training
Institutions in Pakistan: A Quantitative Analysis**

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ABSTRACT

The main objective of this study was to find out the availability of the overall infrastructure and the managerial practices adopted by the Principals to ensure quality management in their respective teacher training institutions as per quality set benchmarks. Forty specific teacher training institutes (TTIs) were selected for this study. All the Principals and 155 faculty members from these institutions situated in Punjab province were selected as a sample of this study. Two questionnaires were developed, one checklist type questionnaire to take the opinion of the Principals and faculty about the infrastructure of the sampled institutions. The second questionnaire was about the quality management practices may be adopted by the Principals. This questionnaire was also administered to the faculty in order to verify the opinion of the Principals about quality management practices. A positive correlation was observed between the opinion of the faculty and the Principals showing the truthfulness of the management practices. The mean score three was fixed as satisfactory point regarding quality management. The position of infrastructure was found deteriorating and the overall management practices remained below the quality point. The proper allocation of budget to these teacher's training institutions were suggested along with the quality management training to the Principals.

Introduction

Education is a man making process and is fulfilled by the educational institutions through quality education. The standards or the quality of the educational institutions totally depends upon the quality of the available

infrastructure, managers, working teachers and the quality product (teachers), of course, are the product of the teacher training institutions. In this sense, the quality of the overall education system at any level is reliant upon the quality of teacher training institutions (Singh, 2004).

The teacher training institutes (TTIs), no doubt, play pivotal role in producing competent, skill oriented, value based and professionally sound teachers having filled with moral, ethical traits and research expertise. Such kinds of teachers facilitate the preparation of the young ones of the nation for better future where they can realize needs, demands and aspirations of the society by putting the nation on the path towards progress and prosperity.

“Leaders have the central position in the quality paradigm that often acts as catalysts for quality management efforts and bringing positive changes in their respective institution. Total implementation of quality norms and the adoption of new management philosophies cannot be taken place in its real sense without the leadership cooperation within any educational institution. Similarly, elimination of the fear cannot be taken into account without the support of leadership (Anita, 1998).

One of the most important actions a college or university should take is to create and support the activities of a Quality Council, composed of the top leaders in the college. They are responsible for initiating and coordinating the strategy of quality improvement efforts. By establishing a Quality Council, top management provides identity, structure and legitimacy to the quality improvement efforts (Arcaro, 1997).

According to Lam 2008, the primary role of the Quality Council is to develop a total quality mindset in the institute by creating a sense of urgency among college staff concerning the need to adopt a total quality improvement approach, establishing a clear sense of direction shared by all members of the institute, engaging, encouraging, and empowering members of the institute, demonstrating personal commitment to the principles and practices of total quality improvement and implementing a measurement system (s) to help ensure the development of a feedback system for fact-driven decisions. Recognizing and rewarding members of the organization for their quality improvement efforts and achievements. Create a constancy of purpose towards the improvement of administrative services, academic programs, improving all forms of practices and process and aim to create quality teachers capable of entering meaningful positions in society (Deming, 1985).

The mission of an institute is the basic purpose it seeks to accomplish the reasons why the institutes exists. The first critical step in setting and maintaining the direction of the college or university is the collaborative development of an institutional mission statement. A mission statement is the formal expression of the institutional purpose for members of the college or university, its constituents, and the public at large. One of the contributions the quality improvement effort makes to

the vitality of a college or university is to focus attention on the institutional mission and its development (Kraar, 2006).

The third critical step in establishing direction is the development of a common belief called vision, in other words one can say the deep and curious thinking and brain storming of what that how the university or college should be like at some degree or point in the far future. A shared mental image of a desired future that what the university or college desired to reach at some degree of status, quality and reputation in the fourth coming era. A vision statement should be a clear, Positive credible, engaging challenging and shared image, a collective "video" of the desired future (Panda, 2005).

A vision defines what is to be created as opposed to what is to be accomplished. It is not derived from an analysis of existing conditions and trends. A vision is a creative leap of faith that transcends, but does not ignore, facts. Experience in strategic planning has shown that derived vision ignore too many potentials to be creative. The creation of a vision involves hindsight, foresight, and insight (Kraar, 2006).

According to Edwin (1992), establishing goals and objectives of the college or university provides the linkage among a broad based focus of vision, mission, culture and the operational activities of the institute. The goals and objectives provide new level of specificity needed for the operational of the mission and vision of the college or university. Goals and objectives define the desired direction and future and help prepare everyone for change. Collectively, the goals, objectives, activities, and projects determine the quality and scope of the input resources needed to achieve the mission and vision of the college or university (Seymour, 1995).

In the process of management at all levels, decision making is considered the most important responsibility of a leader. A lot of management theories have been developed by different scholars and educationists but, all of them focus on the renowned element decision making in the management process. Most of the educationists including Ross (2000) agreed upon the rule that the process of decision making involves identification and recognition of the problem, setting significance level of the problem, formulation of the hypotheses, finding facts and analyzing the problems, appraising intelligently the alternative solutions, choice and prefer the most favorable solution and properly implement the finding solution.

These seven arts of the management process of decision making demands that the decisions must be applicable, applied and workable in within the jurisdiction of the institute. A leader's success is usually measured by the steps taken by him regarding making decisions about the overall grooming of his institute but sometimes there are critical moments when it may be difficult and perplexing for the leader to reach on a suitable conclusion. However the shared and bold decisions with the co-operation and consultation of all the stakeholders and beneficiaries are

the best one and as per quality set benchmarks. So, in order to make quality decisions within and outside the institutes or in private and public life, these ideas regarding decision making may provide a useful and practical guidance (Kumar, 2005).

Problem solving relates closely to such a modern concepts like “Managing conflicts”, “Bringing institutional development” and of course, making intelligent decisions. The best process to minimize and eradicate the conflicts from their inception is to establish a well-defined system of objectives, equal opportunities for incentives and rewards, performance and skill based remuneration and equal opportunities for career development. A good leader must have the capacity to solve a problem or to manage a conflict intelligently if it emerges, rather better to prevent it from happening. (Bowen, 1992)

Within any educational institution problems may be of educational nature or may be personal. Leaders should take all the problems as an obligatory keeping in view the better management scenario in their respective institutions. When a person from the faculty or staff is under a harrow or cloud having less or loses common sense how to do quality work. Then, in these circumstances, only a cooperative, tension and anxiety free personnel may put him on the way to work better also his potentialities in positive quality out puts. So it is the duty of the head of the institute to solve and minimize all types of problems (Bush, 2004).

The quality management process demands that workers must be adequately and appropriately motivated by the leaders. Where there is lack of motivation, the entire management process will be ineffective. There are several types of motivations that leaders may exercise: such as the use of incentives, e.g. monetary rewards and lucrative salaries, additional increments (incentive motivation) in order to enhance the working capabilities of the workers. So motivation is necessary to enhance quality management level of any educational institution (Johns, 1996).

The importance of Teacher Education reflects from the opinion of the founder of Pakistan Quaid-e-Azam Muhammad Ali Jinnah that “No nation can achieve sublimity in the world overall, until unless pays due respect to their nation builders, called the teachers, and when happens the same, shapes its destiny that might result in the universal progress and hustle bustle”. In the first Educational conference 1947, the then educational minister laid emphasis on the development of a Teacher Training academy in Pakistan but his ambition could not nurture in the newly born state due to a lot of problems.

Different studies have already been conducted on the problems and issues and about the analyses of the quality in teacher education in Pakistan after the establishment of HEC in Pakistan. In a study conducted by Khan (2011), the factors like scarcity of physical, instructional and human resources were declared as hindering factors in teacher training institutions. Dilshad (2010), determined the deficiencies in the teacher training institutions like poor infrastructure, Worn out

curriculum having imbalance in theory and practice and futile teaching methodologies that may threaten the quality of teacher training programs.

Javaid (2008) concluded from the analytical study on determining the level of quality management in the TTIs that all such institutions have poor infrastructure, lack of quality awareness and management mechanism, non-availability of Quality Councils (QCs) and Quality enhancement cells (QECs). The availability of QECs is essential to better aware the essence of quality, the functions to apply and maintain it within any teacher training institution (HEC, 2005).

Akhtar (2007) determined that the factors like vague objectives, low status, and deficient management system are responsible for the lower quality in teacher education programs. In 2006, Dogar identified the key factors responsible for the declining standards of teacher education in Pakistan like poor infrastructure of the teacher training institutions, lack of trainings on quality management, dearth of research based environment both for the faculty and prospective teachers.

The government of Pakistan in 2009 reported that the overall quality of public sector TTIs is declining due to some factors in which the most important one is the poor management quality. The Academy of Educational Planning and Management (AEPM) in its report 2009, highlights that approximately 90% public sector teachers' training institutions in Pakistan have poor infrastructure with low management quality. This strongly demands for assessing and analyzing the infrastructure and managerial practices of the Principals in TTIs.

Material and Methods

There are two hundred and seventy teacher training institutions in Pakistan out of which seventy five are in public sector and only seven are in private sector (AED, 2005). This study was delimited to the specific TTIs situated in Punjab province. The list of the specific Teacher Training Institutions was taken from the comprehensive directory on "Teacher Training institutes operating in Punjab" devised by the University of Education Lahore Pakistan (2009). This Directory was developed under a project named "Strengthening Teacher Education in Pakistan" (STEP) in collaboration with UNESCO-Pakistan and USAID-Pakistan. The details regarding TEIs are given as under:

Table 1
Specific Teacher Training Institutes in Punjab

Government sector	Private sector	Autonomous	Total
33	Nil	10	43
Not responding institutions			
03	Nil	Nil	03
Responding institutions			
30 (Principals)	Nil	10 (Principals)	40 (Principals)
211(Teachers)	Nil	47 (Teachers)	258 (Teachers)

Sufficient sample size of the faculty

115

All the Principals and 115 teachers of these specific teacher training institutions served as the population and sample of the study through census and sample survey. Two questionnaires were developed in this study after a thorough review of the related literature. One checklist type questionnaire was developed in order to collect the data about the infrastructure of the sampled institutions from the respective Principals as well as sampled teachers. The second questionnaire was Likert type rating Scale in order to rate the quality management measures taken by the Principals in their sampled TTIs. This questionnaire was developed after reviewing the different studies conducted solely to determine the quality management practices of the Principals. Different quality management determinants were kept in view in order to determine the quality management level of the TTIs on behalf of the managers and administrators. The second Likert type questionnaire was also administered to the sampled faculty members in order to verify the opinion of the principals given in the questionnaire. A positive correlation was found between the score of the Principals and faculty on questionnaire developed to check the quality management practices (QMPs) of the Principals. The questionnaire of the principals was also validated and pilot tested for reliability. The mean score three was fixed as a norm score showing the satisfactory level of Quality Management (QM), the mean score above three up to five showed good to best level of QM. Similarly, the mean score below three showed the poor to the poorest level of QM. The availability of the infrastructure was shown in percentage, 50 percent availability of any resource was fixed as normal level of availability, while less than 50% was below the quality set benchmarks. On the other hand the percentage greater than 50% showed the good to excellent level of infrastructure.

Results and Discussion

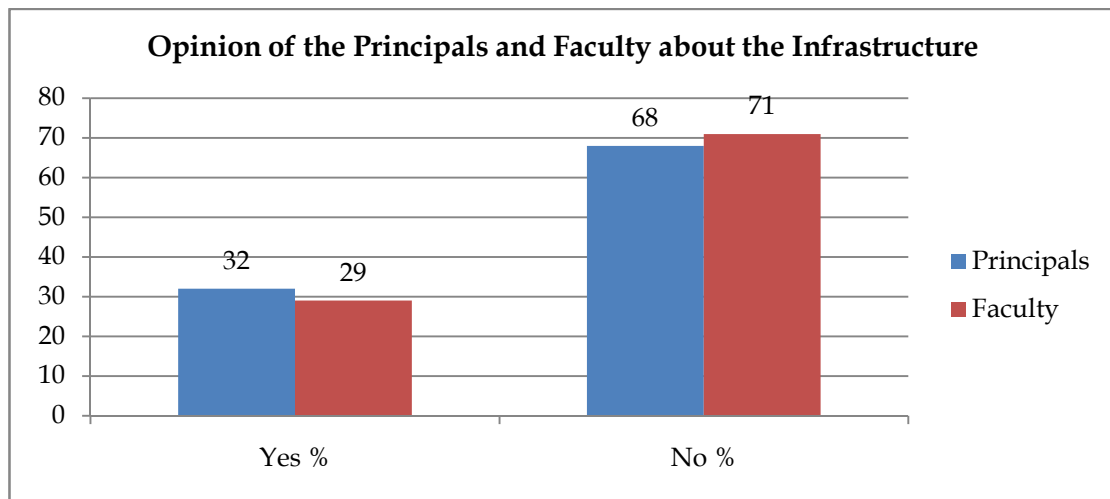
Table 2
Opinion of the Principals about the Infrastructure of the Teacher Education Institutions

Serial No	Statements Physical Infrastructure	Yes	NO	Percentage	
				Yes%	No%
1.	Sufficient academic block	22	18	55	45
2.	Examination Hall	28	12	70	30
3.	Sufficient rooms for faculty members	14	26	35	65
4.	Sufficient furniture for students	16	24	40	60
5.	Sufficient furniture for faculty	34	06	85	15
6.	Student Teacher Centre (STC)	00	40	00	100
7.	Quality Management Cell	01	39	02	88

8.	Sufficient Residential facility for teaching staff	06	34	15	85
9.	Sports grounds	17	23	43	57
10.	Hostel for male students	18	22	45	55
11.	Hostel for female students	08	32	20	80
12.	Cafeteria/canteen	35	05	88	12
13.	Water Supply	39	01	98	02
14.	Dispensary	05	35	12	88
15.	Transport facility for students	03	37	08	92
16.	Transport facility for the Teachers	00	40	00	100
17.	Gymnasium	00	40	00	100
Overall percentage of the physical infrastructure				36	64
Sr.#	Statements	Yes	No	Yes%	No%
Instructional Infrastructure					
18.	Well-equipped computer lab for the students	33	07	83	17
19.	Model class room for learning activities	13	27	33	67
20.	Well-furnished Library	17	23	43	57
21.	Sufficient reference books in the Library	11	29	28	72
22.	Separate A.V aids room equipped with (IT)	11	29	28	72
Well-equipped laboratories in the following disciplines:					
23.	Physics	09	31	23	77
24.	Chemistry	11	29	28	72
25.	Biology	08	32	20	80
Overall percentage of the instructional infrastructure				37	63
Sr.#	Statements	Yes	No	Yes%	No%
Human Resources					
26.	Sufficient teaching staff	18	22	45	55
27.	Research Associates	00	40	00	100
28.	Guidance and Counseling Staff	00	40	00	100
29.	MBBS Doctors	00	40	00	100
30.	Director Physical Education	33	07	83	17
31.	Psychiatrist	00	40	00	100
32.	Horticulture Officer and co staff	00	40	00	100
33.	Librarian and co staff	32	08	80	20
34.	Dispensers	00	40	00	100

35.	Sufficient Lecturer Assistants	02	38	05	95
36.	Sufficient Lab Assistants	12	28	30	70
37.	Sufficient Security Personnel	15	25	38	62
Overall percentage of the human resources				23	77
Overall position about the infrastructure of the TTIs				32	68

Table 2 depicts that the overall percentage in “Yes” was (36) and “No” was (64) about the available physical infrastructure responded by the Principals of the teacher education institutions. Similarly, the overall percentage about the instructional infrastructure as responded by the respondents was (37) in “Yes” and (63) in “No”, while about the human resources, the overall percentage was (23) in “Yes” and (77) in “No”. The overall position regarding the infrastructure was too much declining with percentage (32) in “Yes” and (68) in “No”. The opinion of the faculty was almost same as was the opinion of the Principals about the infrastructure of the TTIs.



**Table 3
Summary**

	Yes	No
Principals	13 A	27 B
Faculty	46 C	114 D

H₀. No significance difference exists between the opinion of the Principals and Faculty about indicator 1 “Infrastructure of the institute”. (Null hypothesis)

N = 200

Chi Square = 0.21

CV = 0.21

Degree of freedom = (C-1) (R-1)

$$df = (2-1) (2-1) = 1$$

Table value (TV) at level of significance 0.05 with degree of freedom = 3.841

CV < TV

The difference is insignificant

Null hypothesis is accepted

So, there is no difference between the opinions of the Principals and Faculty on indicator 1, regarding the overall infrastructure of the teacher training institutes.

Table 4
Analysis of the questionnaire of the principals on the basis of mean score
(obtained from statement wise analyses)

Sr. No	Statements	Mean	Mean combine
Quality awareness and management mechanism			
1.	Quality awareness and Quality management mechanisms are introduced to the faculty members.	1.17	
2.	Quality enhancement cell exists (QEC) at your institute to improve the quality of teachers' training programs.	1.15	1.4
3.	Trainings regarding quality management are planned and organized at your institute.	1.88	
Internal coordination and management			
4.	Participatory approaches are adopted for the better management of the program.	3.52	
5.	Proper coordination and interaction exists between the faculty members.	2.02	2.88
6.	Proper coordination and interaction exists between the faculty and administration.	3.10	
Financial governance			
7.	Budget allocation is sufficient to meet the overall needs of the institute.	1.37	
8.	There exists a transparency in financial management of institution in terms of income and expenditure.	3.97	2.67
Monitoring and Decision making			
09.	Proper monitoring of the staff is conducted on regular basis with a view to improve their professional efficacy.	2.67	
10.	The monitoring results are communicated to the concerned leading to corrective measures for improving the effectiveness of activities.	2.21	1.77

11.	All the staff members are considered the building blocks and take part in the process of decision making.	1.67	
12.	The students and staff perceive those at different positions of administration as competent only exhibit professionalism in their work.	1.32	
13.	The objectives of the institutions are formulated in collaboration with the faculty and staff.	1.00	
Guidance and counseling			
14.	A guidance and counseling unit exists for the prospective teachers at your institute.	1.57	
15.	The guidance and counseling unit is accessible to all the prospective teachers.	1.6	1.39
16.	Guidance and counseling unit provides for activities contributing to the holistic development of the students.	1.00	
Feedback mechanism			
17.	A comprehensive feedback system exists at your institute for the teacher education programs.	2.17	
18.	The institute values feedback not only from within but also from the schools and other stakeholders.	1.65	1.91
Activities regarding Research and development.			
39.	A separate research wing exists at your institute in order to flourish research activities.	1.00	
40.	Research activities are essential for the career development of the faculty members at your institute.	2.45	
41.	Prospective teachers are also involved in the research activities at B.Ed. level.	1.92	1.63
42.	To flourish research activities, the institute publishes its own research journal.	1.1	
43.	Reasonable incentives are granted to the faculty on the production of better research work.	1.67	
Mean combine of the Questionnaire			1.95

Table 4 shows that on Quality management indicator "Quality awareness and management mechanism", the calculated combine mean was 1.4, which is below the quality score (3). While, on the indicator "internal coordination and management", the calculated mean combine was 2.88 which is relatively better than the previous indicator, but not above the norm score (3). Similarly, on determinant "Financial Governance" the combine mean score was 2.67 showing low quality regarding management practices.

On management determinant "Monitoring and Decision making", the value of mean combine was found 1.77. While, on indicator "Guidance and counseling", the mean combine was 1.39. Similarly, on indicator "Feedback Mechanism", the combine mean was 1.91. On indicator "Conducting Research and Development activities", the calculated mean combine was 1.63 which is too much below the norm

score or quality score (3). The overall quality of this questionnaire was found 1.95 showing the lower level of the managerial practices conducted by the Principals in their respective TTIs in quality management (QM) perspectives.

Table 5
Comparing the mean combine values on different quality determinants against the questionnaire of the Principals

Indicators/sub indicators	Principals' Mean Combine
Quality awareness and Management mechanism	1.4<3 (QP). Poorest level of Quality
Internal coordination and management.	2.88<3 (QP). Poor level of Quality
Financial Governance.	2.67<3 (QP). Poor level of Quality
Monitoring and Decision making	1.77<3 (QP). Poorest level of Quality
Guidance and Counseling.	1.39<3 (QP). Poorest level of Quality
Feedback Mechanism.	1.91<3 (QP). Poorest level of Quality
Research and development.	1.63<3 (QP). Poorest level of Quality

Table 5 shows that only on one indicator "Internal coordination and management", the QML remained satisfactory, while on the other four QIs, the QML remained poorest and poor. This shows that the Principals from the sampled institutions are not exercising the quality management practices in their institutions.

Conclusion and Discussion

The quality and availability of the infrastructure was found declining which is shown by the overall percentage of the opinions of the principals as well as faculty against each statement in the check list. Thus, the overall quality of the infrastructure was found very poor. The 64% of the teachers training institutions were deprived of the Physical infrastructure, 63% were deprived of the instructional infrastructure and 77% of the institutions were lacking sufficient human resources. The infrastructure of the GCETs was found rather better than the infrastructure of the Campuses of the University of Education Lahore. The results of the study are in line with the results of the studies conducted by Ahmad (2007), Javaid. M.A (2008), Dilshad (2013), Hussain, S. & Saeed, M. (2008), Shukla (2004) and Farooq (1990)

The quality management practices adopted by the Principals were also found declining. There was Lack of quality awareness and management mechanism, non-existence of "Quality Enhancement Cells" in the entire Teachers' Training Institutions and dearth of continuous trainings regarding quality management. The results of the study support the results of the study conducted by Javaid (2008) and Dilshad (2013) on "Determining the level of Quality management in Teacher Training institutions in Pakistan: applying the Deming's Quality management framework" and on "Quality indicators for Teacher Education: Ananalysis". The position of all the quality determinants on which the questionnaire of the Principals

based was found poor and the poorest. The results of this study are in line with the results of the study conducted by the MacLeod, (2003); Iqbal, (2000) and Hussain, (2008) on the topics "Quality of Teacher Education in Pakistan", "Teacher Education" and "Evaluating the Quality of B.Ed. program: students' views on their colleges experiences" respectively.

The position of the determinant "Research and development" was also found deteriorating on behalf of the total sample of the study including the following sub factors: Non availability of separate research wings in all the Teacher Education Institutions for the purpose of research activities for the administrators. Non-mandatory research work and activities for the prospective teachers at B.Ed. level like writing thesis and dissertation. The results of the study seem parallel with the results of the studies conducted by Mahender, (2006); Shukla, (2004); Farooq, (1990); Javaid, (2008); Bashiruddin, 2012 and Ahmad, (2007).

Recommendations

The following recommendations were suggested in this study:

1. The Government should pay due attention to all the Teachers Training Institutes (TTIs) and allocate more budgets to strengthen their infrastructure.
2. Proper trainings regarding quality management should be organized continuously for the Principals of all the TTIs to ensure quality awareness and quality management mechanism.
3. Proper Guidance and Counseling units should be set up in all the Teacher Training institutes.
4. All the teacher training institutes should publish a research Journal in order to flourish on campus research activities.

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