



# Analysis of service quality of technical educational institutes in Jammu region

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### ABSTRACT

The aim of the paper is to analyze the service quality of technical education being imparted by various institutes in Jammu region. The objective is to determine the satisfaction level of students and the study found that the gap between perception and expectation is negative which proves that no institution is considered satisfactory by the students. But comparing all, MIET is showing the best results in SERVQUAL measure as it has the least gap between perception and expectation. GCET is also scoring well in case of assurance as it has a well qualified teaching staff as compared to other private institutes and also provides assurance of Quality education and placement opportunities.

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### Introduction

India's present growth is led by service sector, which has had a boost due to the ICT Revolution. Education is one of the services which is critical for the upliftment of an individual as well as the economy of the nation. In India education is seen as one of the ways to upward social mobility. Although the Government of India in 2008 has budgeted expenditure of Rs 15577.04 cr for University and Higher education and Rs 7020.36 cr. for technical education but still the gaps exist which leads to less satisfaction levels at the students level With increasing enrolment in higher education, there has been a dramatic compression of per student expenditure since late 1970s as higher education has been the fastest growing segment, thereby leading to quality deterioration with low women enrolment and lower staff-student ratio. (Kaul, 2006).

Education quality is the character of the set of elements in the input, process, and output of the education system that provides services that completely satisfy both internal and external strategic constituencies by meeting their explicit and implicit expectations (Cheng 1995). Being an important agent, higher education service providers are now looked at as having the edge in improving its services. Ever since higher education providers throughout the globe were urged to operate more commercially, quality has been identified as the core ingredient to success, and as the evolution of dynamic competition continues, students as clients must be satisfied. The point is not strictly that satisfying the needs and wishes of consumers is a new concept for the university, but that the orientation towards the consumer has been less common in the university than in business in general (DeShields Jr. et al., 2005).

In order to provide quality, higher education providers must first understand what their students need. To do that, they must understand the quality attributes embraced by these students because quality is perceived differently (Merican et. al. 2009). Education service is classified as a service with intangible actions, directed towards the minds of people, with continuous delivery, conducted through a partnership between the service organization and its client, and although it provides high personal contact, there is low customization (Lovell, 2001). The fact is that teaching excellence is compatible with students'

satisfaction and with high quality supporting services (O'Neill and Palmer, 2004).

Because of several factors like intangibility and involvement of people in the process of providing education, judging the quality of this service is difficult. But the analysis of service quality only can help in determining the existing gaps and identifying the methods to minimize them. Service quality can be measured as the gap between the service that customers expect and the performance they perceive to have received that can be measured through SERVQUAL

### Literature Cited

In 1988 Parasuraman, Zeithaml, and Berry developed a generic instrument called SERVQUAL to measure service quality based on input from focus groups. Although SERVQUAL was developed within the marketing sector, it also is used in a variety of organizational settings. According to them SERVQUAL is universal and can be applied to any service organization to assess the quality of services provided. SERVQUAL provides a technology for measuring and managing service quality (SQ). The SERVQUAL instrument has been the predominant method used to measure consumers' perceptions of service quality. It has five generic dimensions or factors and are stated as follows (van Iwaarden et al. 2003):

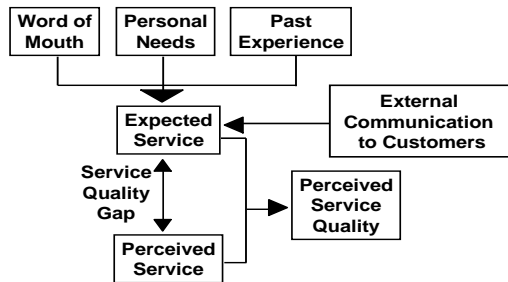
- (1) Tangibles: Physical facilities, equipment and appearance of personnel.
- (2) Reliability: Ability to perform the promised service dependably and accurately.
- (3) Responsiveness: Willingness to help customers and provide prompt service.
- (4) Assurance: (including competence, courtesy, credibility and security); Knowledge and courtesy of employees and their ability to inspire trust and confidence.
- (5) Empathy: (including access, communication, understanding the customer). Caring and individualized attention that the firm provides to its customers.

Based on this scale dimensions, the customers are need to complete the form of the survey on the basis of a seven-point Likert scale, which extends from 1 (strongly disagree) to 7 (strongly agree). Measures of service quality can be derived by subtracting the expectation scores from perception scores, which

also can be weighted to take account of the relative importance of each quality dimension (O'Neill et al., 2001).

Service quality is calculated as the difference in the two scores where better service quality results in a smaller gap (Landrum et. al., 2008). The various determinants like WOM, past experience, customers' individual needs and the promises made through communication effect the customer expectation (figure 1) and customer perception is dynamic as it depends on the expectation.

**Figure 1: Determinants of Service Quality**  
**Determinants of Perceived Service Quality**



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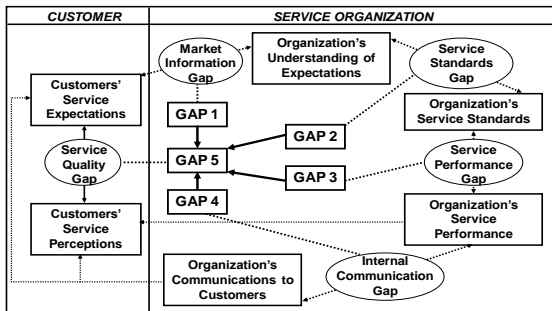
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Source: Parasuraman (2002)

SERVQUAL instrument helps in determining the customer gap (P-E) which is influenced by the existence of other gaps as shown in the figure 2. Thus measuring the customer gap is the most important in determining the quality of service.

**Figure 2: GAPS Model of Service Quality**

A "GAPS" MODEL OF SERVICE QUALITY



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Source: Parasuraman (2002)

**Methodology**

The study is based mainly on the primary data collected from students with the help of a well drafted pre tested structured questionnaire. The universe of the study included all those students of different technical institutes in Jammu region. For the selection of sample, a multistage approach of sampling was followed. At the first stage a list of all the technical institutes was prepared and of these institutes, the following four institutes were selected randomly on the basis of convenient sampling. At the next stage, a list of all students was obtained from the administrative staff of the institutes. At the third stage, the no. of students from each institute was selected in proportion to total students in the institute. Thus the total sample of 200 students was finally selected and the distribution of sample has been presented in following table:

Name of the technical institute	No. of students
SMVDU	87
GCET	65
MIET	25
MBSCET	23

Data were collected from the sample respondents on the pre-structured and pre-tested questionnaire and personal interview method. Questionnaire consisting of four sections were used to collect the data. The questionnaire was segmented on the basis of 5 service quality measures viz., reliability, assurance, tangibility, empathy and responsiveness.

The first section contained the questions designed to extract the demographic profile of the selected respondents such as age, sex, education etc.

The second section consisted of Twenty two attributes accessing the satisfaction level of students from different services contributing to satisfaction with quality of technical education. These twenty two attributes were identified from the available literature. Respondents were asked to rate their expected and perceived satisfaction level toward each of the attribute on a seven point scale ranging from 1(Strongly disagree) to 7 (Strongly agree).

The last section consisted of certain satisfying and dissatisfying service aspects to be mentioned by the students.

The data were analyzed through various statistical tools, account of which has been given below: Tabular analysis was carried out to study the students demographic profile and various service encounters experienced by the students of different institutes. Mean scores were used to rank the respondents satisfaction level towards the twenty two attributes accessing the satisfaction level of students towards the quality of technical education imparted by the respective institutes. For prioritizing the different dimensions of SERVQUAL, each of the five dimensions were weighted according to customer importance, and the score for each dimension multiplied by the weighting. Following this, the Gap Score for each dimension was calculated by subtracting the Expectation score from the Perception score. A negative Gap score indicated that the actual service (the Perceived score) was less than what was expected (the Expectation score). Thus, the Gap score was an indication of each of the five dimensions of service quality

**Analysis of Data**

Table I shows the demographic profile of the respondents and it included sex, age and education. A perusal of the Table I reveals that largest majority of the sample respondents (62%) were male. The largest majority of the sample respondents i.e. 54 % were in the age group of 22-25 years which was followed in by the age group of 19-22 years (33 %) and below 19 years (13%). Education- wise it was discernible that the largest majority of the respondents (73%) were in graduation i.e. engineering and 27% of the students were pursuing MBA

Table 2 shows the difference of the mean ratings of the respondents expected and perceived satisfaction level towards the twenty -two attributes accessing the satisfaction level of students.

Score of -2.96 in case of reliability in case of SMVDU indicates a huge gap between what actually the customers (students) expect from the institute and what actually they are providing. Study reveals that the amount of inputs i.e. in terms of money, time spent by the students is not comparable with the quality of outputs in terms of placements, practical exposure which university lacks in delivering. Accountability in terms of administrative support vis-à-vis students is not completely transparent that is revealed by the high negative scores assigned to faculty and administration related parameters. Post

examination functions are not in tune with the expectations of students regarding impartial grading and revaluation techniques. On the whole the amount of deliverables which the university is providing to the students is not in perfect proportion with each other although the technical infrastructure is among the best but the availability in terms of accessing that infrastructure is noteworthy.

In case of GCET the reliability score is of -1.72 and because of being a govt. college the amount of reliability which a student perceives is moderate and usually it matches their expectations. Assurance level is also high compared to other institutes because of an assurance in terms of providing degrees and placement assistance. Tangibility in terms of Physical infrastructure is also good because of new campus with good infrastructure and lab facilities that provides it a good score. As GCET is governed

Under Jammu University norms so all the grievances are centrally recognized. So the channels of communications are quite formal and elongated thus decreasing the degree of empathy. Due to lack of decentralized structure the amount of responsiveness is low. As the prime decision making is Jammu University, so the institute has to abide by the rules and regulations of Jammu University

In case of MIET the reliability is better because of proper industrial visits and a match with the facilities that are being mentioned in the prospectus. Being a sister concern of Model Group of Institutes, it has good brand awareness and thus shows a better assurance among the students. Tangibles provided by MIET are good only in case of equipments related to laboratory, transportation facility and physical infrastructure but in case of deliverables related to food and medicines the performance is average. Being a private college the channels of communication are informal and quite flexible thus increasing the degree of empathy. Moreover, as the functions are being monitored and carried in house, the level of accountability is increases which in turn increases the responsiveness.

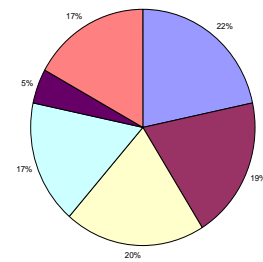
The reliability in case of MBS is quite low because the institute is ranking low in terms of quality faculty and the placement records. The assurance is always a bye-product of quality staff, interactions and support from non-teaching staff but in case of MBS the staff is not experienced and most of the recruitment is done from referral system i.e pass outs are given priority. The score of tangibility is low because the university has started its operations in 1999 and rather focusing on physical infrastructure the institute is focusing on more student intake. In case of empathy the ranking is below average because of lack of experienced faculty as faculty focuses only on academics rather than dual interactions. Prime focus of institute is currently on core aspects such as student raising, student intake rather than focusing on supportive functions such as grievance handling and problem solving.

**Service Encounters:**

The critical Incident Technique as given by Flanagan (1954) has been used in collecting the most satisfying and dissatisfying service encounters of the students. As it is clear from the pie-Charts that in case of SMVDU various satisfying service encounters as reported by the students are well equipped laboratories and libraries, extra-curricular activities, good canteen, industrial trainings, scholarships to outstanding students and flexibility in depositing fee in installments while the dissatisfying service encounters reported by the students are Location not accessible, Bias teachers and Grievance redressal mechanism of the institute not efficient. In case of GCET

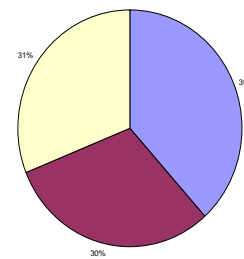
various satisfying service encounters as reported by the students are arrangement of Industrial trainings and visits, location of the old campus is convenient, helping teachers, and less fee compared to other institutes while the dissatisfying service encounters reported by the students are lack of required laboratories facility, location of new campus is inconvenient, no grievance redressal and no scholarships for outstanding students. In case of MIET various satisfying service encounters as reported by the students are good infrastructure, extra-curricular activities, sufficient canteen, good administrative and teaching staff and satisfactory laboratory while the dissatisfying service encounters reported are no industrial trainings and visits, no scholarships provided to outstanding students, no transport facility for students, some bias teachers, indiscipline because of certain students and ineffective grievance redressal mechanism. In case of MBSCET various satisfying service encounters as reported by the students are good infrastructure, flexibility in depositing fee in installments, extra-curricular activities and proper transport facility for the students while the dissatisfying service encounters reported are no industrial visits, no scholarships provided to outstanding students, bias teachers, indiscipline because of certain students, ineffective grievance redressal mechanism and Teacher and staff not so empathetic.

Satisfying encounters reported by SMVDU students



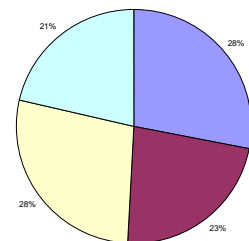
1 Well equipped laboratories and libraries 2 Extra-curricular activities 3 Good canteen 4 Industrial trainings 5 Scholarships to outstanding students 6 Flexibility in depositing fee in installments

Dissatisfying encounters reported by SMVDU students

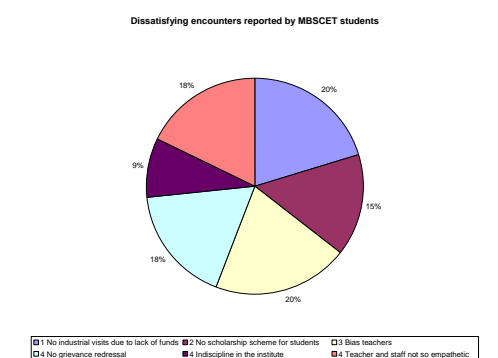
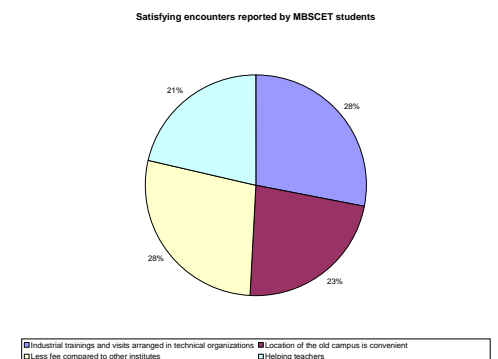
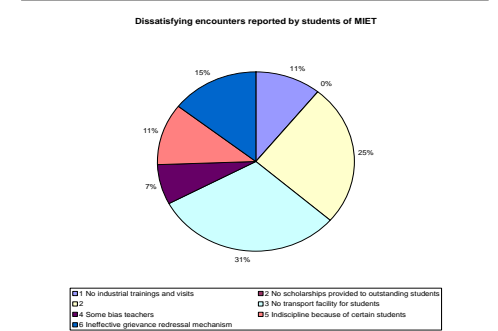
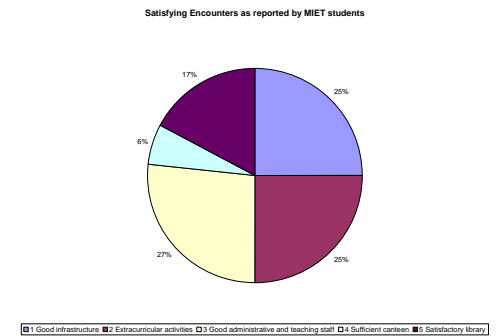
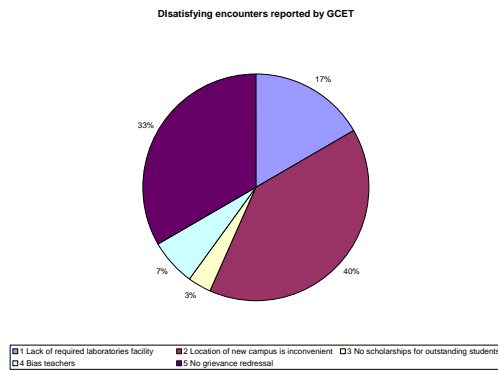


1 Location not accessible 2 Bias teachers 3 Grievance redressal mechanism of the institute not efficient

Satisfying encounters reported by GCET students



1 Industrial trainings and visits arranged in technical organizations 2 Location of the old campus is convenient 3 Less fee compared to other institutes 4 Helping teachers



**Conclusion**

The educational institutes are still lacking in considering the students as their ‘customers’. Measuring service quality on the basis of expectations and perceptions has revealed the fact that

more gap has been found for those dimensions where the expectations by students are comparatively high. More gap between the perception and expectation does not necessarily mean that the education provided is not good. In this paper good is not equivalent to satisfaction. As perception also is a dynamic phenomenon and its dependence on expectation has risen to these results. Also the service encounters reported by the students reflect the various areas where the institutes can improve so as to reduce the gap and ultimately satisfying the students. Though the gap between perception and expectation in MIET is relatively lesser than other institutes but it can be because of the less expectation by the students towards this particular institute. Further detailed study requires to be done to find this.

**Limitations:**

- Sample size was small for arriving at right conclusion.
- Students showed lack of interest while filling the Questionnaires.
- Students may not reveal the true picture of their institute
- Different students have different expectations and varied interests.

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study", International Journal of Quality & Reliability Management, Vol.20, No.8, pp 919-935.

**Table1: Demographic Profile of the respondents**

Category	Number	Percentage
Sex		
Male	124	62.00
Female	76	38.00
Age ( in Years)		
Below 19	26	13.00
19-22	108	54.00
22- 25	66	33 .00
Above 25		
Education		
Graduation(Engineering)	146	73.00
Post graduation(MBA)	54	27.00

**Table 2: Mean ratings of the respondents**

S.No	Institute	Average Score(P-E)				
		<u>reliability</u>	<u>assurance</u>	<u>tangibility</u>	<u>empathy</u>	<u>responsiveness</u>
1	SMVDU	-2.96	-2.78	-2.60	-2.88	-3.22
2	GCET	-1.72	-1.38	-1.55	-1.99	-2.00
3	MIET	-1.06	-1.38	-1.07	-1.68	-1.09
4	MBSCET	-2.06	-2.26	-2.10	-2.31	-2.46
Relatively best		MIET	MIET,GCET	MIET	MIET	MIET