Assessment of Service Quality in Public Secondary Schools of Punjab Based on ServQual Quality Determinants

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Abstract

Purpose: Service quality is very much neglected thing in the government sector schools as the government monitoring bodies as well as the school management only focus on improving “education quality”. So, there is need to assess the gap between student’s satisfaction and schools management performance about the overall service quality provided in the institutions and identify the strong areas to maintain and weak areas to improve the service quality.

Methodology: Survey based quantitative research approach was used to empirically test the theoretical framework. Primary data was collected from a sample of 100 students based in Okara, Punjab, Pakistan. A structured questionnaire is designed comprising formal, objective, valid and unbiased questions to collect the data. Statistical methods are used for data analysis to refine results and finding conclusions.

Results: The results reveal that the most satisfied factors or in other words school strengths are the ‘reliability’ (accuracy of service) and ‘assurance’ (competence of teachers) factors. And weak areas are tangibles and empathy with a sufficient focus on responsiveness (library staff response).

Originality and value: The study is unique for and highly value adding in a way that it has empirically tested the generalizability of ServQual quality determinants theory. In addition, it has also revealed the role of school management to improve their service performance and enhancing students’ satisfaction. Furthermore, this study will serve as foundational study for further researches in this concern.

Research Implications: This research focus on the service quality determinants therefore, specific education quality is not covered. The respondents are the public sector schools’ students so the results could differ if the same research is conducted for the private sector schools’ students. In addition, the government can take initiatives in order to enhance the service quality at government schools by facilitating infrastructural and service quality aspects support.

Keywords: Service Quality, ServQual, Education Quality, Secondary Schools, Education, Public Schools, Government Schools, Students Satisfaction

1. Introduction

Student’s experience and perception about the total educational quality they received from their institute is often expressed as education focused quality. Most often, government policies and regulations to improve the overall educational quality is oriented to improve the curriculum contents, teacher’s competence, students’ ability and training i.e. to improve the educational aspects only. But keeping in view the global service quality requirements, overall quality of Schools, as institutions should be covered all service quality determinants. Inclusion of “Service” context while determining overall educational quality of Schools is an important and real element to gauge the quality of institutions either they are from public or private sectors. In public sector secondary schools, where the customers (students) are adversely deprived of the basic needs of services they should receive, improving overall service quality should be in the focus and priority of government regulatory and monitoring bodies.

Irrespective of the education quality provided to students in public sector secondary schools, service quality is the least considerable quality determinant by the major stake holder of service provider in public sector i.e. by the Government. Government initiatives and measures to improve the total education quality is limited to improve the educational aspects only. Service Quality offered by the public secondary schools should be covered all service quality determinants, like infrastructural improvements, students individual concerns, individual attention to students, teacher’s competence, response of admin and teaching staff in schools, assurance of all services provision by the schools authorities etc. This research was conducted to assess the service quality provided to students of public sector secondary schools of Punjab. In order to assess and gauge the students expectations and their perception about the service quality they are receiving from schools administration, famous SERVQUAL model approach was used. 5 service quality determinants of ServQual which were designed by Parasuraman are globally practiced and found comprehensive in assessment and measurement of overall service quality of institutions and service providers.

Assessing Service Quality is a marketing approach to examine students’ perceptions of service quality in the context of secondary education may improve service functions, and attract and retain students. However, retention of students at secondary schools level is not a major issue but to measuring their perception (satisfaction) about the quality of services will yield improvement initiatives to enhance the overall education
quality of institutions. As in government sector, students often suffer low service quality by the management of schools.

The previous research studies in assessment of overall quality of services in education sector especially in public category schools are not well focused in measuring overall service quality. They usually focus to point out the educational quality gaps and then suggest their countermeasures. However, researchers describe individual service quality gaps and with respect to specific and individual quality issues faced by the students at public secondary schools.

2. Purpose Statement
Purpose of this research is to assess the student’s satisfaction about the overall quality of services they are receiving from their schools management. Measuring service quality is also important to enhance the overall quality of education in the public sector secondary schools. Public schools management have only focus on improving education quality. This research will give an insight for the government schools management to improve their individual services in order to compete the private sector. As in government sector, schools are usually deprived of luxury infrastructure and other supporting staff to facilitate the students.

This study was conducted to show the gap between student’s satisfaction and schools management performance about the service quality provided by the institutions. This gap will provide the improvement space for the public schools management as well as for the government bodies in order to improve their overall quality of services in education sector for secondary schools.

3. Significance of the Study
1) This research is not limited to assess only the education quality parameters i.e. teacher’s competence level, student’s learning objectives, curriculum quality with respect to social and cultural requirements etc. The research covers overall service quality parameters which have been comprehensively described by ServQual model and are as follows. (i) Reliability (ii) Responsiveness (iii) Assurance (iv) Empathy (v) Tangibles.
2) Theoretically, this research will provide a base stuff for future researchers in order to understand and to further explore the individual service quality areas where quality of service is not up to the mark and below student’s expectations.
3) Practically, this research has provided important areas of improvements to schools management as per student’s assessment. This provide an opportunity for public sector to enhance their quality of service to compete the market competitor’s i.e. private sector.
4) Research has indicated the performance enhancement areas for public sector schools management in reference to their customer’s expectations for improving overall management and area wise performance with respect to service quality.
5) Empirical objective approach is adopted provided unbiased and fare assessment of students satisfaction. Students have been asked clear questions in the form of questionnaire comprising likert scale. Quantitative research approach is adopted that provides facility of statistical analysis of results to test and predict and relate the correlations students’ perception and management performance.

4. Research Objectives
• Main objective of this research is to assess the gap between student’s satisfaction level and public sector school’s management performance.
• To provide students an opportunity to raise their real issues to schools regarding overall service quality provided to them.
• To provide a priority to government bodies to focus on the low quality areas of services provided to students.
• To assess the real issues faced by the students in public schools and give awareness to students and parents as well as teachers and concerned personnel.
• To provide a base research stuff to future researcher who are focusing on improving / assessing quality of education or overall service quality in education sector.

5. Philosophical Foundations
In searching the reliable method of measuring service quality in education sector, logical and objective method is best describe the comprehensive measurement and assessment of what we want to measure. Although qualitative researches have also been conducted to measure the issues related to individual service quality areas but that needs very massive detailed worked and to summarize the findings of all qualitative data is also another difficult job. So, measuring quality of service through objective way using deductive method and quantitative approach is the best way of determining the overall quality assessment in a single glance.
6. Research Model / Theoretical Framework
The theoretical framework or research model in describing the schematic description of relationship among ServQual quality determinants and student’s satisfaction is given below. Roots for the selected model for research is broadly available in literature for the assessment and measurement of service quality in different areas.

![Proposed Research Model]

7. Literature Review
Most of the literature regarding assessment / measurement of service quality in education sector is available for higher education and business education. The secondary school level education and especially the service quality aspect regarding secondary schools is often less addressed by the researcher. And this point is also the justification of this research work. As the determinants of service quality are common regardless of education level therefore we look after the literature for business and higher education service quality as well. The independent variables utilized to measure service quality and widely selected by researcher are based on ServQual quality determinants which are (a) Reliability (b) Responsiveness (c) Assurance (d) Empathy and (e) Tangibles. These are independent variables that influence the dependent variable i.e. “Student’s Satisfaction”.

The current studies develop a number of measures of service quality in commercial service settings. Of these service quality measures most of the studies have used either the SERVQUAL (perception-minus- expectation) measure (Parasuraman et al., 1985, 1988) or the SERVPERF (perception-only) measure (Cronin and Taylor, 1992, 1994).

In describing the TQM implementation at Oregon State University, Coate (1990) wrote that “Quality is what our customers tell us it is, not what we say it is. Progress can only be determined and improved by measurement”.

Customers do not know what they are getting until they do not get it (Levitt, 1981; Zeithmal et al., 1990) so it is necessary for the provider to put in place mechanisms for gaining the views of customers before and during the period of service provision. SERVQUAL has been identified as a potential source for exploring the students’ perceptions expectations gap (Hill, 1995). The personal interactions between academic staff and students are crucial in regard to perceived service performance. This is evidenced by the number of students that identify approachable academic staff as a key factor for their success. Another key factor which influences customers’ perceptions of service performance is reliability. This involves consistency of performance and dependability, specifically, performing the service at the designated time (for example turning up for classes), and providing students with accurate records of performance (McElwee & Redman, 1993).

Measuring service quality is very important to retain students in any institution. But perception of quality is different for different stakeholders. Therefore, institutions may improve their services in the light of discussed dimensions of SERVQUAL according to the perceptions of major stakeholder- that is student (Zeeshan, Afridi &
Khan, 2014).

The maintenance of the service provider's physical facilities i.e. tangibles of facility can dramatically influence consumers' perceptions of the quality being offered by the service provider. A school's faculty and their ability to interact comfortably (the assurance factor) with foreign students can positively affect students' perceptions. Students not only expect knowledgeable and qualified faculty but also frequently need teachers or mentors who will help them with the sometimes troublesome transition to a new school. To create an atmosphere of a courteous and caring faculty and staff, the administration must set the tone by example as well as by specification. Reinforcement of this schoolwide goal should be paramount in the school's mission (Chuck Tomkovich, Jamal Al-Khatib, Babu G. Baradwaj & Sheila Iskra Jones (1996).

Memon (2007) wrote, without teachers' transformation (increasing assurance quality determinant) we cannot transform the education system for improving the overall quality of education in Pakistan. In this regard, a series of education reforms in the area of teacher education were introduced in the public sector but their vision seemed to be narrow, hence, they failed to make any substantial impact on the quality of teachers and teaching process. Eventually, it further affected the quality of education being offered in schools.

In order to improve the school services, the authority should pay special attention to particular needs of teachers of the small schools in remote areas who work under difficult conditions which make it more difficult to achieve government targets. Finally the society should show respect for front line teachers, and trust them to use their own best professional judgment in classroom situations as they arise, and also to prepare individual students in the direction suitable for them (Shu-wen Wu, Chao-yin Lin, Su-fang Wu, Chin-Lien Chuangd, Hsiao-Yun Kuan (2013)).

Services have been differentiated from products in a number of ways. Shostack (1977) has argued that services are more intangible than products and that the most intangible service of all is teaching. Thus, there would appear to be merit in evaluating the performance of tertiary education institutions with a services marketing instrument such as SERVQUAL. Concept of customer-driven service quality is a meaningful one for educators who wish to develop measures of the quality of education in the tertiary sector. Furthermore, performance indicators which are client driven, such as those suggested in the SERVQUAL approach, are useful adjuncts to the more commonly used, and often sterile, measures of tertiary education activity. They also have implications for planning activities insofar as tertiary institutions can link customer focused performance measures to the strategic direction which they wish to pursue at a university and faculty level (Geoffrey Soutar, Margaret McNeil (1996)).

8. Research Question
What is the gap between student’s satisfaction level and service quality provided to students at public sector secondary schools of Punjab?

9. Research Methodology
1. Research paradigm selected for this research work is the “Positivism”. Empirical scientific methods are utilized based on formal and structured objective questions.
2. Quantitative research approach is adopted to conduct the research process. A structured questionnaire is designed comprising formal, objective, valid and unbiased questions to collect the data. Statistical methods are used for data analysis to refine results and finding conclusions. Deductive reasoning on arguments and analysis to test the theories and hypothesis is utilized and strive to generalize the key findings. Then data is analyzed in SPSS software to interpret findings. Statistical methods used are bar charts, box plot method and different graphs to express individual service quality performance of schools management.
3. Research is designed based on famous ServQual Model which is broadly utilized to measure service quality in the field of education. To measure and understand the customer satisfaction, selection of ‘Quality Determinants’ or ‘Service Quality Dimensions / Factors’ plays a key role. ServQual researchers developed the most widely reported; comprehensive and appropriate set of service quality determinants.
ServQual five quality determinants with their brief description are given below.

<table>
<thead>
<tr>
<th>Service Quality Dimension</th>
<th>Description / Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reliability</td>
<td>Performing the promised service dependably and accurately.</td>
</tr>
<tr>
<td>2. Responsiveness</td>
<td>Helping customers and providing a prompt service.</td>
</tr>
<tr>
<td>3. Assurance</td>
<td>Inspiring trust and confidence.</td>
</tr>
<tr>
<td>4. Empathy</td>
<td>Providing a caring and individual service to customers.</td>
</tr>
<tr>
<td>5. Tangibles</td>
<td>The physical facilities and equipment available, the appearance of staff; how easy it is to understand communication materials.</td>
</tr>
</tbody>
</table>

4. For the research purpose 2 schools are visited in which one is boys’ school and second is girls’ public secondary school of province Punjab. Data is collected from 100 students with equal contribution of both boys and girls schools.

5. The strategy of inquiry chosen for the research design includes the survey based approach in which questionnaire is floated to collect the data from students. A formal, structured questionnaire is designed to collect the data. Students are briefed before giving research questionnaire about the purpose of research and questionnaire type in order to get correct measurements against questions.

6. A questionnaire comprising closed ended questions intended to measure all service quality aspects have been asked to students. A total of 25 questions asked; 5 question for each dimension of service quality with likert scale ranging from 1 to 5 describing highly dissatisfied to highly satisfied level of student’s satisfaction.

7. Validity and reliability of each question is determined using SPSS software by applying relevant test and qualifying appropriate scores in order to assure unbiased and fare position.

8. Statistical data analysis techniques have been employed to express student’s satisfaction level against each service quality dimension and as well as satisfaction against overall service quality provided to students. Graphical techniques and box plots are utilized to statistically describe the results as per empirical observations.

10. Research Findings

Overall results of survey “Expectation vs Performance”

To determine the gap and priority for improvement in the education service quality delivered by the selected government school, a questionnaire distributed among 45 students of 10th class studying in science group. Total 25 questions were asked dividing in 5 quality determinants equally (5 questions for each quality dimension). Survey Questionnaire is attached as Annex 2 in the project report.

After summarizing the results using simple descriptive statistics calculating mean of each question and then for each dimension and then for overall expectation and performance level, result found is mentioned in below table both for expectation of students and their satisfaction level about the quality of education they are receiving from the school.

<table>
<thead>
<tr>
<th>Sr#</th>
<th>Service Quality Determinants</th>
<th>Expectations</th>
<th>Performance</th>
<th>Performance%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reliability</td>
<td>4.75</td>
<td>4.40</td>
<td>93%</td>
</tr>
<tr>
<td>2</td>
<td>Responsiveness</td>
<td>4.89</td>
<td>4.44</td>
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<td>Assurance</td>
<td>4.93</td>
<td>4.63</td>
<td>94%</td>
</tr>
<tr>
<td>4</td>
<td>Empathy</td>
<td>4.84</td>
<td>4.24</td>
<td>88%</td>
</tr>
<tr>
<td>5</td>
<td>Tangibles</td>
<td>4.78</td>
<td>3.33</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>Overall Result</td>
<td>4.84</td>
<td>4.21</td>
<td>87%</td>
</tr>
</tbody>
</table>
It is also noted that as author discussed earlier, in ServQual model, expectations are rated on ideal or excellent level. As we see in the table, average rating of all students about their expectations is 4.84 out of 5.0. It is 97% (round off value). This means that although the students have high expectations from the school management about education quality but still they are not ideally expecting 100% quality from the school.

97% expectations indicate the permanent impact of lower level quality service in one of the service quality factor empathy (we’ll discuss in details after). This result also strengthen the researcher’s point of view that if a service provider previously providing bad service or lower quality service among its competitors, this will imparts a direct impact in lowering the customer expectations about the quality of service in future.

Graphical representation of overall expectation vs performance level of service is given below.

According to their expectations, students have 87% satisfaction on the quality of service they are receiving. This shows a reasonable space of improvement and opportunity for increasing the performance for the school management to increase the satisfaction of their primary customers (students) as well as secondary and tertiary customers (parents and society respectively). On the other hand, 87% satisfaction level of customers is sufficiently good and appropriate for a government sector service provider institute like school in comparison of other schools providing the same services.

**Dimension-wise Results with Quality Factors**

Dimension-wise analysis shows the more detailed view about the students expectation and satisfaction level about the education service quality delivered by the school. Statistical data obtained after the survey is given in below table.

<table>
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We’ll discuss in details each dimension according to satisfaction level given by the students. Below is the dimension-wise Box and Whisker Plot of survey.
Expectations (Box & Whiskers Plot):
According to the Box and Whisker Plot, almost all the students show their maximum expectations from the school to provide good education service quality. As, the whole box and whisker plot goes very close to the maximum rating scale 5.0, it illustrates that students expectations are very high. The minimum expectation belongs to the reliability of service which is also high 4.75. That’s why the minus whisker is very close to the Q1 and there is a narrow gap between min. and Q1. The maximum expectations mean is 4.93 which is related to assurance dimension. Q2 and Q3 are almost equal means 25% students (Q3) have more expectations than 50% students (up till Q2). According to box and whisker result, all the dimensions of education service quality are very important for almost all the students. (as min. 4.75 and max. 4.93 are nearly equal to 5.0).

Satisfaction / Performance (Box & Whiskers Plot):
There is a big gap between minus whisker (minimum) and Q1. As min. starts from 3.33, this shows some of the students are neutral and neither satisfied nor dissatisfied by the overall quality of education they are receiving from the school.

<table>
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</tr>
<tr>
<td>Q1</td>
<td>4.78</td>
</tr>
<tr>
<td>Median</td>
<td>4.84</td>
</tr>
<tr>
<td>Q3</td>
<td>4.89</td>
</tr>
<tr>
<td>Max.</td>
<td>4.93</td>
</tr>
<tr>
<td>Min.</td>
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</tr>
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<td>Q3</td>
<td>4.44</td>
</tr>
<tr>
<td>Max.</td>
<td>4.63</td>
</tr>
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</table>

The overall satisfaction box and whisker plot is ranging below the minimum expectation; it starts from min. 3.33 and ends up 4.63 max. show students are not receiving the 100% quality of education services that they expect from the school as the minimum expectation they have is 4.75 and the maximum satisfaction they are receiving is 4.63 on rating scale. As Q2 and Q3 is lies between 4.0 & 5.0, this means 75% students are satisfied (but not highly satisfied) by the overall service quality.

- Dimension-wise Radar Chart gives the compliance result of each dimension by the satisfaction with expectation. According to the chart, tangibles are not attractive and students are least satisfied by the infrastructure and overall tangibles facilities provided by the school. Also, school management should focus on improving the empathy dimension to attain more favor of students or in other words to delight their customers.
Above bar chart illustrates the comparison of each quality dimension for the student’s expectation and their satisfaction level or the performance of the school. Now, we’ll discuss each dimension result according to the highest to lowest performance rating given by the students.

**Assurance**
According to the survey, among all service quality determinants; students shows their highest satisfaction on the ‘Assurance’ dimension of service quality. It means instructors / teachers are competent, trained and students are satisfied about the deliverables of their teacher. This result is good for the school present and future expected performance as teacher’s instructor’s competence is the key thing which delivers good and best quality of education to the students.

But 94% assurance means school management should arrange further training and knowledge up gradation workshops for the teachers to enhance their key competency area.

**Reliability**
According to expectation, the satisfaction level about the reliability of service is 93%. This is good as well. 93% performance about the overall reliability of service shows that different school departments / service areas are delivering sufficiently accurate results and providing promised and accurate services to the students. However, school should focus on delivering the promised service accurately each time and every time to build up the students trust and confidence level 100% to meet the expectations. Question-wise further discussion will give more insight that which service factor should be given more attention to improve.

**RESPONSIVENESS**
91% satisfaction result is appropriate as per expectations. As for the education sector, reliability and assurance are the comparatively more important factors than other quality factors by weight age. But 9% gap is reasonable to improve the service response dimension. And school management should improve their responsiveness and always have a helping and prompt attitude for their customers (students during provision of services.

**EMPAHTY**
This is the 2nd least satisfied quality determinant by the students. 88% performance level shows there are few incidents when some of the students don’t get individual attention and care by the school staff. School principal should advise and instruct to her staff to improve this factor by giving more individual attention and care. Question-wise results will more elaborate that which specific service quality area needs improvement to enhance empathy factor. Usually, the administrative and health care areas always need more attention to improve their service quality.

**TANGIBLES**
Among all quality dimensions, school tangibles are the least satisfied factor rated by the students 70% satisfaction level. Tangibles include overall infrastructure, building, labs, apparatus, computers in IT lab, play grounds and canteen etc. School management should give more attention to increase quality of tangibles to give more comfort and satisfaction to their students. This would not means the attractive buildings or luxurious touch to class rooms or very precious equipment / apparatus utilized in labs. This may mean to improve the cleanliness and orderliness of all tangibles and in the specific area where ever necessary, school management should put their expenses to increase the attractiveness of infrastructure and other associated tangibles that will ultimately increase the comfort level and thus satisfaction level of students.

There may some constraints for the school management regarding budget amount to expend on improving
tangibles as it is a government school having a fixed budget amount in comparison to other private sector schools that mainly earn from the students fees and can put reasonable amount of revenue / budget to increase the attractiveness and comfort of their customers.

**Question-wise Results of Expectations vs Performance**

Question-wise results give more detailed, specific and clear view about the strengths and weaknesses of service areas regarding student’s expectations and satisfaction level. Below is the question-wise box and whisker plot.

![](image)

**Expectations (Box & Whiskers Plot):**

According to the expectations box and whisker, questions-wise student’s expectations are very nearly to 5.0.

- Q1, Q2 and Q3 are closely packed and located near maximum rating level 5.0.
- It means all the questions are almost very important for the students.

Student’s highest rating regarding each question also indicates the questionnaire accuracy and adequacy about the concerned service area to be evaluated.

There are few students who show their expectation as just ‘important’ rather than ‘very important’ for them.

<table>
<thead>
<tr>
<th>Expectations</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min</td>
<td>4.49</td>
</tr>
<tr>
<td>Q1</td>
<td>4.73</td>
</tr>
<tr>
<td>Median</td>
<td>4.91</td>
</tr>
<tr>
<td>Q3</td>
<td>4.93</td>
</tr>
<tr>
<td>Max</td>
<td>5.00</td>
</tr>
<tr>
<td>Min</td>
<td>2.11</td>
</tr>
<tr>
<td>Q1</td>
<td>4.22</td>
</tr>
<tr>
<td>Median</td>
<td>4.44</td>
</tr>
<tr>
<td>Q3</td>
<td>4.69</td>
</tr>
<tr>
<td>Max</td>
<td>4.87</td>
</tr>
</tbody>
</table>

**Satisfaction / Performance (Box & Whiskers Plot):**

There is big gap between Q1 and minimum shows that some of the students are dissatisfied regarding quality of particular service which is indicating by the questions comparison in bar chart (given below) that question # 20 and 25 are rated as ‘dissatisfied’ by the almost all of the students and question# 23 is rated as ‘neutral’ by average of the students.

Below are the specific questions for illustration of this gap indicated by the box and whisker plot, so that school management should focus on these areas to improve their quality of service. Also, by improving these 3 areas, overall impact of education quality will remarkably increase.

- 20# School arrange recreational tour for student’s entertainment. *(Empathy)*
- 25# In school canteen, healthy food items are served with proper sitting arrangement for students. *(Tangibles)*
- 23# Multimedia facility is available in each class room for presentations and teaching purpose. *(Tangibles)*
Regarding Q#20: After interviewing the students, it is noticed that school management never arrange a recreational or even educational tour for the students. And this is found the major dissatisfaction by the students. This is not the healthy activity for the school and students as well in a sense depriving recreational events organized by the school. School management must focus on arranging a recreational event/tour at least once a year for students to increase their empathy and so to increase their overall education service quality.

Regarding Q#25: It is noticed that there is no sitting arrangement for the students at school canteen. And students often complaint about the poor quality of food items served at the canteen. The school management should provide proper sitting arrangement for students in order to improve the tangibles service dimension. Moreover, assurance of providing hygienic food items is necessary.

Regarding Q#23: It is noticed that multimedia facility is only available in IT lab and none of the class room is equipped with multimedia facility. Not all, there should be some class rooms which should facilitated by multimedia to make them model class rooms (for high level classes like 9th and 10th).

The two boxes Q2 and Q3 and max. whisker lies between 4.0 and 5.0. This indicates that 75% students show their fairly satisfaction upon the specific areas of quality of education. As per plus whisker, some of the students are highly satisfied by the specific areas of quality. These are related to responsiveness and assurance of the staff (as shown in the bar chart).

Radar chart shows the question-wise compliance of expectations and performance. Q#6 and Q#19 to Q#25 need more attention to improve quality of service specifically provided to students as it perceived by the questions.

11. Limitations & Delimitations

Limitations of this research work are as follows:
Focus of this research is the overall service quality not the education quality. Questions are typically asked to determine service quality in their respective service quality determinant. Thus education quality measurement should not be searched in this study.
This research is conducted on secondary schools level students studying in public sector of Province Punjab. Therefore, the same students at private sector might have different satisfaction level and there would be the case. As private sector provides more facilitation to their students and have attractive infrastructure of schools.

Delimitations of this research work are as follows:
The findings of this research work can be generalized to whole public secondary schools of province Punjab as the sample are taken from the more populated districts schools.
Results of each quality determinant provide clear understanding of specific service quality determinant that’s why government school’s management can focus individual areas in order to get break through improvements in overall service quality provided to students.

12. Discussions

Recommendation for improvements
By the results of survey and after statistical analysis illustrates by the bar charts (question-wise and
following improvements are recommended to school management to improve their overall education service quality.

1. **Improving Tangibles**

Students are least satisfied by the tangibles output of school. School should improve:

- Proper sitting arrangement at school canteen.
- Healthy and hygienic food items should be served at canteen.
- Multimedia facility should be available to each class room or at least some model class rooms.
- Cleanliness is also need to improve to reach satisfaction level.

2. **Improving Empathy**

Students are also dissatisfied by the empathy factor. School management must:

- Arrange an annual recreational tour and a session-wise educational tour for the students.
- Conduct school level recreational gatherings

3. **Improving Responsiveness**

Students show their below satisfaction rating (towards neutral) about the responsiveness of library staff.

- Library staff should be trained and advised to be more attentive and efficient in their core responsibility of providing / issuing books / printed / electronic material for study purpose to students.

School management should form a team / committee for planning, implementing and improving these recommendation in order to increase their performance and students satisfaction level.

13. **Conclusion**

- Overall quality of education delivered by the school is appropriate. 87% performance is appreciated in response to students’ expectations.
- The most satisfied factors or in other words school strengths are the ‘reliability’ (accuracy of service) and ‘assurance’ (competence of teachers) factors. School can achieve 100% student’s expectations by taking minor considerations on these two factors.
- Regarding weaknesses or areas of improvements, tangibles and empathy with a sufficient focus on responsiveness (library staff response) are the dissatisfied factors. School must focus and take effective countermeasures to improve their overall education quality from 87% to 100%.
- An improvement plan must be made and properly implemented and monitored by the steering committee to get real results of this survey and to improve the highlighted weaknesses.

14. **References**


Coate, L.E. (1990), Implementing total quality management in a university setting, Oregon State University working paper.


