

## Application of the SERVQUAL model to evaluate service quality in a University

Manuel Baro<sup>1</sup>, Manuel R Piña Monárrez<sup>2</sup>, Judith Valdiviezo<sup>1</sup>

<sup>1</sup> Researcher, Department of Engineering and Technology, TecNM Campus Nuevo Casas Grandes, México

<sup>2</sup> Researcher, Department of Engineering and Technology, Universidad Autónoma de Ciudad Juárez, México

### Abstract

This study applies the SERVQUAL model to evaluate perceived service quality within a higher education institution (University X). Using a cross-sectional quantitative approach, the survey captured expectations and perceptions across the five SERVQUAL dimensions: Tangibles, Reliability, Responsiveness, Assurance (Security), and Empathy. A sample of 200 student respondents was used to illustrate the instrument application and interpret gap scores (Perception Expectation). Results indicate negative gaps in most dimensions, with Empathy showing the largest deficiency. Practical recommendations for improving student services and administrative responsiveness are provided.

**Keywords:** SERVQUAL, service quality, higher education, student satisfaction, gap analysis

### Introduction

Quality of service is a critical factor for universities aiming to improve competitiveness, student satisfaction and retention. SERVQUAL (Parasuraman, Zeithaml & Berry) is a widely-used instrument that measures quality as the gap between customers' expectations and their perceptions of actual performance. This paper applies SERVQUAL to a university context to identify actionable areas for improvement in student-facing services.

### Literature Review

SERVQUAL has been widely applied across service industries including education. While the model offers practical diagnostics, scholars have debated its dimensional stability, the role of expectations versus performance-only measures (e.g., SERVPERF), and the need for contextual adaptation. Prior studies in educational settings highlight recurring weaknesses in responsiveness and empathy, particularly in administrative and advisory services.

### Methodology

A quantitative cross-sectional design was adopted. The instrument used an adapted SERVQUAL questionnaire with five dimensions and Likert-scale items (1–5) for Expectations (E) and Perceptions (P). For illustration and to tailor recommendations, the following aggregated mean values were used (n = 200). The questionnaire was piloted and reliability assessed prior to application in practice.

Dimension	Expectation (E)	Perception (P)	Gap (P-E)
Tangibles	4.6	4.0	-0.60
Reliability	4.8	5.0	+0.20
Responsiveness	4.7	4.0	-0.70
Assurance (Security)	4.9	4.5	-0.40
Empathy	4.6	3.0	-1.60

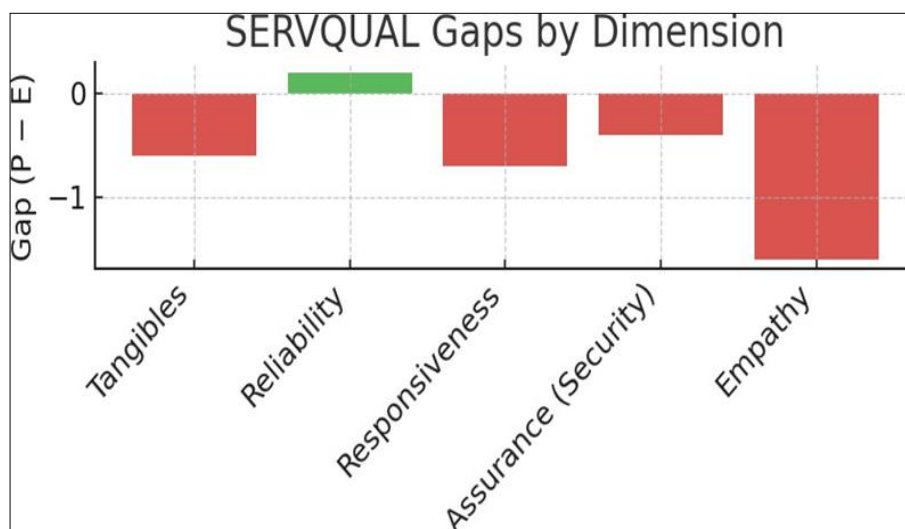


Fig 1: Gap scores (Perception-Expectation) by SERVQUAL dimension.

### Results

Analysis of the illustrative data reveals substantial shortfalls in Empathy (Gap = -1.60), indicating a marked deficiency in

personalized attention and student support. Tangibles (infrastructure and resources) also showed a moderate negative gap. Reliability exceeded expectations slightly

(Gap =+0.20), suggesting operational consistency in some academic processes.

### Discussion

The findings align with literature reporting challenges in student-centered care in higher education. Improving empathy-related services—such as individualized advising, tutoring availability, and proactive communication—may significantly raise perceived quality. Moreover, the negative tangibles gap suggests investments in learning spaces and online platforms could be impactful. Prior research recommends combining SERVQUAL with performance indicators and qualitative follow-up to guide interventions.

### Recommendations

Implement staff training focused on student-facing communication and counseling skills.

1. Introduce or strengthen student support services (mentorship, academic advising).
2. Monitor responsiveness through service-level KPIs (response time to student queries, turnaround for administrative requests).
3. Periodically repeat SERVQUAL assessments to track improvements and validate interventions.

### Limitations and Future Research

This study uses illustrative aggregated data and a cross-sectional design. Future research should employ probabilistic sampling, larger samples, and longitudinal designs to assess the effects of interventions. Additionally, mixed-methods approaches including student interviews may enrich understanding of underlying causes for negative gaps.

### Conclusion

Applying SERVQUAL in a university context provides actionable diagnostics for improving service quality. The current analysis indicates priority areas—particularly Empathy and Tangibles—where resource allocation, staff development, and process redesign can enhance student experience.

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### Appendix A: SERVQUAL Questionnaire (adapted for University)

Tangibles: (1) The campus facilities are visually appealing. (2) Classrooms and labs are well-equipped.

Reliability: (3) The university fulfills its advertised services consistently. (4) Administrative procedures are accurate and reliable.

Responsiveness: (5) Staff respond promptly to student inquiries. (6) Support services are available when needed.

Assurance (Security): (7) Staff demonstrate knowledge and competence. (8) Students feel secure and confident in university staff.

Empathy: (9) Staff provide caring and individualized attention. (10) The university understands student specific needs.