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A Research study to determine customer service at universities in the Dominican Republic

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FORM K
A RESEARCH STUDY TO DETERMINE
CUSTOMER SERVICE AT UNIVERSITIES
IN THE DOMINICAN REPUBLIC

by

Thelma M. Roman

A thesis
submitted to the faculty of
Rochester Institute of Technology
in partial fulfillment
of the requirements for the degree of
Master of Science in
Service Management
August 2000
ABSTRACT

This study was conducted at Pontificia Universidad Catolica Madre y Maestra (PUCMM), to determine customer service at universities in the Dominican Republic. The sample population consisted of 250 undergraduate students and 16 academic and administrative head of departments.

As results indicate, there is lack of evaluating mechanisms to determine customer satisfaction in all departments at PUCMM. The only evaluation in place is a survey done by students every semester to evaluate faculty’s performance and academic quality; nevertheless, such evaluation does not determine customer satisfaction. Furthermore, there are few evaluations to determine students’ needs.

On the other hand, according to the findings, administrators believe that feedback is used to implement quality customer service; nonetheless, by reviewing the data, it is concluded that there is ambiguity in the responses given by administrators as to the use of feedback, since the results show that few evaluations are in place to determine customer satisfaction.
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Dedication

This project is dedicated to God, my Father, for His love.
To my children, Graciela, Mario Cesar and Marie, my treasures.
To my friend forever, Mario Mendez.
To Jim Miller for believing in me.
To Victor Brens and Joel Zapata for their dedication.
To Metanoia for the “Dead Ants.”
CHAPTER 1

Customer Service at Universities in the Dominican Republic

Introduction

Universities are service providers, and many use customer service principles in their management. Perhaps arising this dictum is another: “In order to manage a business, there has to be measurement”.

In the age of service management, how important is it to measure customer satisfaction? Should all businesses measure customer satisfaction? Are universities businesses? If so, should they also measure customer satisfaction? What research has shown is that the answer to these questions is “yes”. Concepts of Service Management should be applicable to all organizations (Fitzsimmons 1998). Educational institutions are service organizations and as such they should apply service principles to their operational system.

Customers are the reason companies stay in business. Understanding drivers of customer satisfaction should therefore, be a key management objective in order to achieve real competitive advantage. Determining the most important service features, to capture customers’
perception and expectations through evaluations should be the concern of all service providers.

**Research Questions**

In the findings, the following questions will be answered:

- What specific mechanisms are in place to measure customer satisfaction?
- What evaluating mechanisms are in place to determine students' needs?
- Is feedback utilized to implement quality customer service?
- How do students perceive customer service at Pontificia Universidad Catolica Madre y Maestra (PUCMM)?

**Background**

This research was conducted at Pontificia Universidad Catolica Madre y Maestra (PUCMM) and was selected as it is one of the most prestigious educational institutions of higher education not only in the city of Santiago, but also throughout the Dominican Republic. PUCMM is known for its academic excellence and its continuous effort in offering quality education. It was founded by the Catholic Dominican church in 1962, in the second largest city, Santiago de los Caballeros, Dominican Republic. It emerged as an answer to the educational needs that arose in the country during the process of political and social development after the
death of the dictator Rafael Leonidas Trujillo. Most important, it was founded to answer the educational needs in the region of "El Cibao" important in the country for the development of national economy.

Since its foundation, PUCMM has grown in accord with new times maintaining a realistic vision of the future of the Dominican Republic. It has been a pioneer in the development of new programs in the country, necessary for its growth, as well as the introduction of higher education system procedures of academic administration applied in modern universities of the United States, Europe and Latin America. PUCMM is distinguished by a series of characteristics that are in accord with its philosophy: (Olivo, R., 1999).

- Its catholic character.
- Its character of private institution, of public service without lucrative ambitions, open to all, without distinction of race, social class, ideology or religious creeds.
- Its promise of being "a higher education institution that pursues academic excellence."
- The established objective: to work for the integral development of human beings.

Mission:

"The Pontificia Universidad Catolica Madre y Maestra is compromised, in accord to its nature, with the search for solutions of the challenges the Dominican nation faces, maintaining its character of forum that ensues reflection, dialogue and the free discussion of ideas and with the preparation of leaders, technicians and
professionals the country needs for its integral development, under the light of the Christian faith, in a world characterized by scientific and technological advancements”.

It is clear, from the history and stated mission of PUCMM, that as an educational institution the main focus has been the emphasis on academic excellence, and that it has met the expectations of changing times in the scientific and technological fields. Nevertheless, it is not clear whether students, as customers, have an understanding of the definition of mission stated by PUCMM. Bogue and Saunders (1992) propose that the definition of quality in higher education requires an operational expression of mission and goals, which asks that institutions outline more clearly and specifically those knowledges, skills, and values they expect to be associated with their credentials and degrees. “What difference did we make?”

Edosomwan (1996) states that the mission of an organization must identify the customer(s), their requirements, the processes and the products; develop measures of the output that reflect customer requirements; review the preceding steps with the customer and adjust them as necessary.

Due to socio-cultural behavior patterns in the Dominican Republic, most students do not contemplate the
idea of moving to another city to continue undergraduate or graduate studies. For that reason, students could be considered captive users of educational institutions especially in cities, like Santiago, where prestigious higher education establishments are not abundant.

Customer service in higher education covers a broader range of issues that span from educational excellence to the development of quality administrative services that are necessary to evaluate and draw conclusions as to the quality of the product. Universities, as the primary source of education in the Dominican Republic, should be aware of the importance of evaluating services, and very important, acknowledge who their customers are. Higher education institutions can be models for others to follow in serving the interest of students.

**Purpose**

The purpose of this study is to determine the current level of customer satisfaction regarding service delivery and its influence on customer service.

There is a particular emphasis on whether mechanisms are in place by administrators at PUCMM to evaluate customer satisfaction and to determine students' needs; the perception of students regarding customer service. In addition, attention is given to whether or not
feedback is used by administrators to implement quality customer service.

**Significance**

Measuring customer satisfaction, understanding what customers want and expect, and using feedback should be of primary concern to administrators in all service organizations. Feedback helps management determine the areas of strengths and weaknesses, target opportunities for improvement, and understand customers' perception regarding service satisfaction.

This study may provide university administrators at PUCMM an insight as to the importance of applying concepts of service management to their operational system.

**Methodology**

The sample population for this research consisted of undergraduate students attending PUCMM during the summer of 2000 in addition to academic and administrative personnel.

A descriptive study was conducted and a Likert scale response instrument was employed to rate students' opinions regarding service delivery as a determiner of customer satisfaction. The focus of the questionnaires administered to students at PUCMM, measured their perception with regard to customer service, it also asked
if there are evaluations in place to measure customer satisfaction at PUCMM, and if feedback is utilized to implement quality customer service. The administrators' survey focused on whether or not there are evaluations in place at PUCMM to measure customer satisfaction, the mechanisms used to determine students' needs, and the use of feedback to implement quality customer service.

It was assumed that university officials are familiar with customer service methods but chose not to use them. As a result of this assumption, the survey had to carefully guard against that bias. The survey made no such assumption, but listed and described customer service measurement techniques regardless of administrators' knowledge of those principles.

In order to guard against interviewer's bias and leading questions, the survey was standardized, taking care to ask all the questions in the same manner. In an attempt to purify the data, a standardized review was administered.

**Literature Review**

The review of the literature includes topics concerning concepts of perception and how perception is measured; principles of Service Management and its evolution, as well as some methods used to measure quality and customer satisfaction; customer service in
higher education and the application of concepts of service principles to higher education operational systems are discussed.

**Definition of Terms**

**Administrators:** Directors and Deans of administrative and academic departments at Pontificia Universidad Catolica Madre y Maestra (PUCMM).

**Cibao:** A region in the Dominican Republic in the Northern and Central part of the island.

**Customers:** Students

**Educational Quality:** Conformance to mission specification and goal achievement within publicly accepted standards of accountability and integrity. (Bogue and Saunders, 1992)

**Gap:** A wide divergence or difference. (Random House Webster's Dictionary, 3rd ed.)

**Normal:** Standard, average. (Merriam-Webster, 1962; Webster's Students Dictionary)

**Product:** Acquisition of academic knowledge and services rendered at educational institutions.

**PUCMM:** Pontificia Universidad Catolica Madre y Maestra

**Quality:** Defect prevention and conforming to customers requirements (Crosby). Fitness for use (Juran).

Quality can only be defined by customers (Deming)
Rafael Leonidas Trujillo: Dictator who ruled the Dominican Republic for 30 years, killed by opponents in 1960 in an ambush.

Stakeholder: People affected by organization's decisions and actions (i.e. parents, students, employees).

Word-of-mouth: Consumers telling other consumers of their experiences-impressions—both good and bad.
CHAPTER 2

Literature Review

The review of the literature will include topics concerning concepts of perception according to organizational behavior. In addition, how perception is measured in accordance to studies conducted. Principles of Service Management and its evolution will be discussed as well as some methods used to measure quality and customer satisfaction.

Topics of customer service in higher education and the application of concepts of service principles to higher education operational systems will be presented. Various systems for quality assurance embraced in higher education in the United States will be reviewed to provide educational institutions with a framework to establish excellence and help them assess measure achievement on a wide range of key institutional performance indicators.

What is Perception?

Perception can be defined as a process through which individuals organize and interpret their sensory impressions in order to understand their environment. However, what one perceives can be substantially different from the objective reality (Robbins, 1996).
The needs or unsatisfied motives stimulate individuals and could strongly influence their perception. This was dramatically demonstrated in a study conducted in an investigation about hunger. In the study individuals had stopped eating in different lapses. Some had eaten a few hours previous to the study, others had stopped eating 16 hours before; blurry pictures were presented to individuals. Results indicated that the degree of hunger influenced their interpretation of the pictures. The ones that had not eaten for 16 hours perceived the blurry images as food more frequently than those that had eaten a few hours prior to the study (Robbins, 1996).

Another factor that influences individuals' perception is the social factor. It can be identified as having an important role in shaping the way in which the world around us is perceived. Daily behavior is largely guided by the way in which the world is perceived around individuals (Secord and Backman, 1964).

Customers' perception of services depends largely on the way their expectations are met. To find out those expectations and how organizations are perceived by customers, it is necessary to conduct evaluations. Surveys will also help identify the gaps that might exist between administrators' perception of what they might
believe customers want, vs customers' actual needs. Measuring the gaps between expected services and perceived services is a routine customer feedback process that is practiced by leading service companies (Fitzsimmons, 1998).

**How is Perception Measured?**

European marketing researchers (Edwardson and Gustavsson, 1998) and a team of US scholars, (Parassuraman, Zeithaml and Berry) have recognized the need to develop valid and distinct measures of service quality. They developed a 'gaps' model to explain customer satisfaction, as illustrated in figure 1.1.

It starts by defining expected service: 'what consumers feel a service provider should offer', and perceived service: 'customer perceptions of the firm providing their service'. The gap between the two constructs generates service quality (Jamison, 1999).

In figure 1.1, the gap between customer expectations and perception is defined as GAP 5. This gap shows the influence of the other four gaps associated with the delivery of service.

The first gap is the discrepancy between customer expectations and management perceptions of those expectations. GAP 1 arises from management's lack of full understanding about how customers formulate their
expectations on the basis of a number of sources: advertising, past experiences with the firm and its competitors, personal needs, and communications with friends.

Customer

<table>
<thead>
<tr>
<th>Word-of-mouth communication</th>
<th>Personal needs</th>
<th>Past experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</table>

- Expected service

- Perceived service

GAP 5

Marketer

<table>
<thead>
<tr>
<th>GAP 3</th>
<th>External communications to consumers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service delivery (including pre and post contacts)</td>
<td></td>
</tr>
</tbody>
</table>

- Translation of perceptions into service quality specifications

GAP 2

- Management perception of consumers' expectations

Figure 1.1 Service Quality Gap Model.
Strategies for closing the gaps include improving market research, fostering better communication between management and its customer contact employees, and reducing the number of levels of management that make the customer distant (Fitzsimmons, 1998).

The second gap results from management’s inability to formulate target levels of service quality to meet perception of customers’ expectations and translate them into workable specifications. GAP 2 may result from a lack of management commitment to service quality or a perception of the unfeasibility of meeting customer’s expectations; however, setting goals and standardizing service delivery tasks can close this gap (Fitzsimmons, 1998). The third gap is referred to as the service performance gap because actual delivery of the service does not meet of the specifications set by management. GAP 3 can arise for a number of reasons, including lack of teamwork, poor employee selection, inadequate training, and inappropriate job design. Customer expectations of service are formed by media advertising and other communications from the firm.

GAP 4 is the discrepancy between service delivery and external communications in the form of exaggerated promises and lack of information provided to contacted personnel (Fitzsimmons, 1998).
When expectations are confirmed by perceived service, quality is satisfactory. As shown in figure 1.1, these expectations are based on several sources, including, personal needs, past experiences, and word of mouth (Fitzsimmons, 1998).

Word-of-mouth is a powerful method of advertising which no one in the company can control. It is simply consumers telling other consumers of their experiences-impressions-both good and bad. According to studies done by TARP, dissatisfied customers tell twice as many people about their experience as do satisfied customers (Albretch, 1992).

Customers who participate in surveys will expect their opinions to be listened to and action taken to correct any major issues; therefore, it is imperative that customers identify those factors that they deem to be critically important, enabling companies to focus only on those areas of customer concern. If surveys are structured correctly, these critical factors can be easily diagnosed (Jamison, C., 1999).

Customer Service

Due to the evolution of world economy the quality of life has become one of the major interests of society and services have become an important feature enhancing life quality. It is not surprising that a concept of service
management was born as an answer to the evolution of social and industrial needs. As the needs for services emerged, products became and integral part of them forming an inseparable bond.

With the growth of the service sector over the past 30 years, specialized technology has played an important role in the advancement of delivering service efficiently as the world has become connected through computers. Connectivity is putting everybody and everything online in one way or another and has led to “the death of distance”, a shrinking of space; Speed *X* Connectivity *X* Intangibility (Davis & Meyer, 1998). In the process, management is driven to innovations. Customers have created needs as they have become the “spinal cord” of the service delivery. They have set the mark as to the quality of service they want.

In the world of economics, the service industry is a challenge. Quinn and Gagnon (1986) point out that the economy trends in services are undeniable, and that they are similar to the recent experience in manufacturing.

**Principles of Service Management**

Fiztsimmons (1998) establishes that concepts of service management should be applicable to all service organizations. The service package is defined as a bundle of goods and services that is provided in some
environment. This bundle consists of the following four features:

1. Supporting facility. The physical resources that must be in place before a service can be offered.

2. Facilitating goods. The material purchased or consumed by the buyer or the items provided by the customers.

3. Explicit services. The benefits that are readily observable by the senses and that consist of the essential or intrinsic features of the service.

4. Implicit services. Psychological benefits that the customer may sense only vaguely, or the intrinsic features of the service.

"All these features are experienced by the customer and form the basis of his or her perception of the service. In services a distinction must be made between inputs and resources themselves. Inputs are the customers themselves and resources are the facilitating goods, employee, labor, and capital at the command of the service manager" (Fitzsimmons, p. 24, 1998).

In the process of service delivery, customers play an active part. They are the drivers of how services and product will be rendered. Customers have the power of making business rethink new ways of doing things, specially about efficiency and quality.

The human element is central to effective operation in the service industry. Employees are key in the service system, they are considered internal customers
according to service management principles. Employees are the ones who deliver the service package. Front line personnel must be carefully chosen and trained. Detailed description of job assignments and empowerment are to be developed by administrators for the delivery of service quality by the staff.

The service encounter is a triangle formed by the interacting interests of the customer, service organization, and contact personnel. The service encounter triad, figure 1.2, captures the relationship between the three parties in the service encounter and suggests possible sources of conflict (Fitzsimmons, 1998).

![Figure 1.2. The service encounter triad.](image)

**Service Organization.** Strict operating procedures are imposed by organizations to follow a cost leadership strategy in a standardize service delivery limiting the discretion of the contact personnel. Customers are presented with a few standard service options from which to choose and personalized service is not available. Fast food organizations as McDonald have taught customers what not to expect from their service. As a result of
not having a limiting contact personnel, satisfaction is diminished

Contact Personnel-Dominated Encounter. Service personnel attempt to limit the scope of the service encounter to reduce their own stress in meeting demanding customers. When contact personnel are placed in an autonomous position, they may perceive themselves as having a significant degree of control over customers. The customer is expected to place considerable trust in the contact person’s judgment because of the service provider’s perceived expertise. The relationship between teacher-student illustrates the contact personnel encounter.

Customer-Dominated Encounter. The extremes of standardized and customized services represent opportunities for customers to control the encounter. For standardized services, self-service is an option that gives customers complete control over the limited service that is provided. The result can be very satisfying to the customer who needs or desires very little service. (Fitzsimmons, p. 240, 1998).

For a satisfactory service encounter the need and the control of the three parts should be balanced. Employees should have a performance measurement and reward system to help the company communicate its strategic priorities and highest values. Clear purpose and supporting values are integral to great service (Fitzsimmons, 1994).

Service Quality

Quality and services are delivered in the same package. Most business people in the United States have used a “two-track” terminology in thinking about quality. There is “product quality” and “service quality.” “The product is fine, but the service is poor.” “We make good
products, but we need to pay attention to customer service.” (Albrecht, 1992). Those were the believes in old days when customer service had a narrow meaning.

With the competitive pressure from Japanese products which had become legendary for their quality, the Western quality theory shifted to Total Quality Management (TQM) a highly structured set of methods which a number of quality experts, notably Crosby, took back from the Japanese, who after all, had learned them from the American theorist W. Edwards Deming (Albretch, 1992).

In the last 15 years, the quality movement has gained momentum in Western industrialized countries as many manufacturing companies have tried to close the quality gap with Japanese products (Albrecht, 1992). Understanding the importance of quality as a way of increasing productivity, reducing costs and meeting customer’s needs many managers focused on quality (Suarez, 1992).

Quality must be defined in measurable and clearly stated terms to help the organization take action based on tangible targets, rather than on hunch, experience, or opinions. To Crosby, quality is either present or not. Management must measure quality by continually tracking the cost of doing things wrong. Crosby refers to this as price of non-conformance (Suarez, 1992).
Deming asserts that the quality of any products or service can only be defined by the customer. Quality is a relative term that will change in meaning depending on the customer’s needs; managers must understand the importance of consumer research, statistical theory, statistical thinking, and the application of statistical methods to processes (Deming, 1986).

Juran defines quality as fitness for use. He stresses a balance between product features and product free deficiencies. The word “product” refers to the output of any process, and that includes goods as well as services (Juran and Gryna, 1995).

Crosby’s main point is that quality is achieved by preventing defects and conforming to requirements. Requirements must be agreed upon and employees must know how to achieve them. He avocates for “doing things right the first time” which is his performance standard (Suarez, 1992).

Deming takes a systems leadership approach to quality. He believes that managers should pursue goals similar to those of science (explain, predict, control) to learn more knowledge about the systems and processes in their organization.

He is critical of managers who look elsewhere for solutions (e.g., copying a remedy, adopting others
successful ideas). He emphasizes continuous improvement and believes that it is management’s obligation to constantly and forever improve the system of production and service. When Deming describes quality, he talks about product that possesses a predictable degree of uniformity suited to the end-users at a price they can pay (Deming, 1986).


The Project-by-project approach is at the heart of Juran’s philosophy. Using concepts of the Spiral of Progress and the Breakthrough Sequence, managers are able to target and improve specific areas.

Crosby, Deming and Juran agree that it is management’s responsibility to establish an organizational culture in which commitment to quality is the main focus. The mission of the organization must be clear to everyone, and every management action must lead to fulfillment of that mission. This culture should be characterized by commitment from the top of the
They agree that continuous education and training at all levels is necessary to foster a common language of quality and to develop employee skills and knowledge. Effective communication, cooperation, and teamwork throughout the organization are essential. They agree that more than 85 percent of all problems associated with quality can be attributed to management policy or action. This means that management action is required to achieve improvements.

They also agree that the pursuit of customer-focused quality is a long-term process that will not produce results overnight. The improvements will be evident over time in terms of reduced costs, but, more importantly, organizations will eventually be able to anticipate and prevent problems. The approaches do not represent programs in the usual sense of the word; they do not have starting and ending dates. These are management philosophies aimed at long-term improvements through adoption of strategic planning for quality.

These philosophies have been implemented over the years in various organizations in different countries. As philosophies they go beyond the economic concerns of an organization and address an organization's employees as well. They give high priority to pride in workmanship, education, and the work environment as well
as to team building, teamwork, cooperation, and participation, all essential to cultural change (Suarez, 1992).

**Measuring Service Quality**

It is not enough to make changes if quality is not evaluated in a constant basis in order to determine customers' satisfaction and the strength and weaknesses in service delivery; therefore, measuring customer satisfaction is crucial to the success of any organization.

Measures allow a business to: (1) know how well the business process is working, (2) know where to make changes to create improvements, if changes are needed, and (3) determine if the changes led to improvements. Various measurement techniques can index the quality of business processes, products and services.

Measures of quality often focus on objectives or hard indices. For example, in manufacturing Industries, the process of producing parts is conducive to measurements of size (such as parts) and amount (for example, scrap or rework). In nonmanufacturing industries, measurements could include the time to complete service or the number of written errors on a particular form (Hayes, 1998).
Recently, there has been a desire to utilize more subjective or soft measures as indicators of quality. The measures are soft because they focus on perceptions and attitudes rather than more concrete, objective criteria. It is often necessary to use these measures because objective indices are not applicable in assessing the quality of services. These soft measures include customer satisfaction questionnaires to determine customers’ perceptions and attitudes concerning the quality of the service or product they received, as well as employee attitude questionnaires that assess employee’s perceptions about their work life (Hayes, 1998).

To incorporate customers’ perceptions and attitudes into their quality improvement efforts, companies must be able to gauge customers’ attitudes accurately, and one way to measure customers’ attitudes is through questionnaires (Hayes, 1998).

According to Hayes, (1992) the use of customer satisfaction questionnaires seems most appropriate for organizations in the service sector or other non-manufacturing fields. In the manufacturing industry quality can be assessed by an objective index like the size of produced parts; however, the service sector offers little in the way of objective quality measures.
Even hard measures (for example, time) used in the nonmanufacturing environment might not reflect the true quality of the service. For instance, if the transaction completion time for a service is measured by a stop watch and indicates a fast completion time, this does not ensure that customers perceive the completion time as fast. The customer may have expected an even faster time. Because "quality is determined, in part, by the extend to which goods meet the customers' requirements, the measurement settings is probable best indexed by customers' perceptions of the service received" (Hayes, p. 5, 1992).

A general model for the development and use of customer satisfaction questionnaire was designed by Bob Hayes. This model which illustrates the process in general, appears in figure 1.3. Each phase of the process contains specific steps, each focusing on an important element in the understanding of customers' opinions (Hayes, 1998).

![Diagram](image)

**Figure 1.3 Model for customer satisfaction questionnaires.**
Step 1 in the process is identifying customers’ requirements or quality dimensions, the important characteristics of a product or service. Customer requirements define the quality of products or services. In this step, not only the quality dimensions is identified, but also specific examples of these dimensions.

Knowledge of customer requirements is essential for two reasons. First, it provides a better understanding of the way customers define the quality of services and products. Second, knowledge of customer requirements will facilitate the development of the customer satisfaction questionnaire. Its questions should assess the extend to which customers are satisfied on each of the quality dimensions.

Step 2, in the process, is developing the questionnaire; it includes many specific components. The ultimate goal of this step is to develop a questionnaire that allows the assessment of specific information about customers’ perceptions. The specific information should correspond to the underlying customer requirements identified in Step 1.

Once the questionnaire has been developed, the next step is to use it. Step 3 represents the many specific information about customers’ perceptions. The uses vary
from identifying the current status of customer satisfaction to assessing customer satisfaction over time.

As illustrations, some methods used by firms to measure quality and customer satisfaction are described below:

**SERVQUAL**

A widely used instrument in measuring quality is the SERVQUAL, an effective tool based on the gap model which measures the five dimensions of service quality: reliability, responsiveness, assurance, empathy, and tangibles (shown in figure 1.1, p. 19). This instrument has been designed and validated for use in a variety of service encounters. The authors have suggested many applications for SERVQUAL, but its most important function is tracking service quality trends through periodic customer surveys (Parasuraman, Zeithaml and Berry, 1998).

**Advisory Groups**

Advisory groups are volunteer groups of customers that meet at regular intervals to provide in-depth suggestions and direction to a company. Sometimes community or industry leaders or experts are also included. Some of the purposes advisory groups serve are to:
Provide ideas for technical or service innovations.
Detail dissatisfiers.
Provide network opportunities or access that may not otherwise be available.
Test products or services.
Represent a wide range of input.
Be ambassadors for the company

Advisory groups provide an opportunity for valued customers to codevelop products or services. Delta Airlines started 10 business advisory groups around the country in 1994, using them to refine services for its frequent business flyers. Suggestions ranged from improving the baggage compartments of Lockheed 1011 airplanes to offering more variety in meal service.

Advisory board members are selected based on the company's objectives. If the objectives focus on service or product feedback and improvements, make sure the company has adequate representation from market segment that are important to the company (Kessler, 1996).

**Customer Satisfaction Surveys**

Customer satisfaction surveys are written questionnaires that determine levels of satisfaction with various facets of the product or service. Surveys are one of the most abused quality tools. Many organizations quickly compose a superficial set of questions and then send it to a sampling of customers. Then these organizations base their entire quality strategies on a
return rate of less than 15 percent for their questionnaires. The questions frequently don’t represent what is important to customers, and the answers are from too small a sample size.

Surveys can provide a way to compare key quality indicators from year to year. They provide important information about the perception of the quality of service. If done well, they can also show how the organization rate compared to its competition (Kessler, 1996).

**Customer Service in Higher Education**

As stated by Fitzsimmons, (1998) concepts of Service Management should be applicable to all organizations; educational institutions are service organizations and as such, they should apply service principles to their operational system.

In the United States, higher education has opened its doors to Service Management realizing the importance of functioning in accord with new times. It doesn’t mean that all educational systems in the United States are willing to make changes, or that they have realized they should manage their institutions as corporations do, in which students are considered customers. It has been very difficult for those who have embraced the new paradigms to join the new business world in which
customers are the ones who dictate how businesses should handle their services and deliver their products.

Educational institutions rank among the nine largest service industries in the United States, according to the U. S. Bureau of Labor Statistics Report on Employment and Earnings, with more than 9.1 million employees. This ranking puts education even ahead of such service delivery systems as both health care and general government (Chitwood, 1996).

Haag-Mutter and Jones (1988) maintain that there are important differences between an institution of higher education and business enterprise: the first one is that business and industry exist for profit, and the second is that higher education administration has some difficulty translating management thinking into action. This difficulty is brought about because the typical administrative head of an academic department is interested primarily in his or her academic specialty; achieving success as a business manager or supervisor is only a secondary desire, if it is a desire at all.

Finley, (1998) further notes that college administrators must recognize the differences between their own institution and private industry. First, higher education is not oriented toward products or services for profit. Second, teaching is difficult to measure.
Third, faculty members, administrators, and staff members all perform distinct duties (Chitwood, 1996). As a result, there might be little team effort. With the absence in higher education of a participatory environment, lack of accord on its products, but an abundance of vested interests, it is little wonder colleges and universities grapple with customer service (Chitwood, 1996).

Finley cites Holt and Wagner’s (1983), research observed that support departments of colleges resemble departments in the private sector. These include physical plant, finance office, registrar’s office and bookstore, all of which impact the internal as well as external service delivery element.

It has been asserted that values and beliefs, along with professional education, can stand in the way of workers adopting a service oriented attitude. Thus, the highly trained professionals filling a variety of faculty, administrative and even staff positions in colleges and universities can have difficulty thinking of themselves in a service role.

As Albrecht (1992) notes, educators may be the last people to adopt a service orientation toward people they are supposed to serve. The educational systems in the
Western world, perhaps throughout the world, have been bureaucratized and institutionalized.

"To suggest that the learners, and those who are paying for the education of the learners, are customers draws a blank look from traditional educators. Those who take this unusual attitude are vastly outnumbered by those who think of the educational institutions as a permanent fixture and the students as merely passers-by who flow through the system and leave money behind" (Albrecht, 1992; p. 74).

As stated earlier, American higher education has opened its search for quality. How is quality measure in higher education in the United States?

**Systems for Quality Assurance**

The following are examples of systems for quality assurance that have been embraced in higher education in the United States to measure quality and customer satisfaction: Accreditation and program reviews are the more traditional approaches for quality assurance in colleges and universities. Another approach is the assessment and outcomes movement, which calls for the development of performance evidence and attention to value-added questions. Total Quality Management (TQM) is a third movement in both corporate and collegiate settings; it invites our attention to continuous
improvement and customer satisfaction. Periodic accountability and performance indicator reports are required by some institutions (Gaither, 1998).

**The Malcolm Baldrige National Quality Award**

After seeing the results of improvement in efficiency and effectiveness in the corporate world, the Baldrige Award, given annually to American organizations, is now given to educational institutions; 1999 marks the first year that educational institutions are eligible to apply for the Malcolm Baldrige National Quality Award.

The Award is named for Malcolm Baldrige, who served as Secretary of Commerce from 1981 until his death in 1987. His managerial excellence contributed to long-term improvement in efficiency and effectiveness of government. Public Law 100-107, signed into law on August 20, 1987, created the Malcolm Baldrige National Quality Award. Public Law 100-107 led to the creation of a new public-private partnership. Principal support for the program comes from the Foundation for the Malcolm Baldrige National Quality Award, established in 1988.

The Criteria provides a valuable framework for performance excellence and can help institutions assess and measure performance on a wide range of key institutional performance indicators: Student/stakeholder, educational service and outcomes,
operational, and financial. Self-assessment allows to identify strengths and to target opportunities for improvement on processes and results affecting all key stakeholders—including students, faculty, staff, and community. The Criteria can also help align resources; improve communication, productivity, and effectiveness, and achieve goals.

<table>
<thead>
<tr>
<th>1999 Categories/Items</th>
<th>Point Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Leadership</td>
<td></td>
</tr>
<tr>
<td>1.1 Leadership System</td>
<td>100</td>
</tr>
<tr>
<td>1.2 Public Responsibility and Citizenship</td>
<td>80</td>
</tr>
<tr>
<td>2 Strategic Planning</td>
<td></td>
</tr>
<tr>
<td>2.1 Strategy Development Process</td>
<td>60</td>
</tr>
<tr>
<td>2.2 School Strategy</td>
<td>40</td>
</tr>
<tr>
<td>3 Student and Stakeholder Focus</td>
<td></td>
</tr>
<tr>
<td>3.1 Knowledge of Student Needs and Expectations</td>
<td>40</td>
</tr>
<tr>
<td>3.2 Student and Stakeholder Satisfaction And Relationship Enhancement</td>
<td>40</td>
</tr>
<tr>
<td>4 Information and Analysis</td>
<td></td>
</tr>
<tr>
<td>4.1 Selection and Use of Information and Data</td>
<td>80</td>
</tr>
<tr>
<td>4.2 Selection and Use of Comparative Information and Data</td>
<td>25</td>
</tr>
<tr>
<td>4.3 Analysis and Review of School Performance</td>
<td>15</td>
</tr>
<tr>
<td>4.4 Analysis and Review of School Performance</td>
<td>40</td>
</tr>
<tr>
<td>5 Faculty and Staff Focus</td>
<td></td>
</tr>
<tr>
<td>5.1 Work Systems</td>
<td>100</td>
</tr>
<tr>
<td>5.2 Faculty and Staff Education, Training And Development</td>
<td>40</td>
</tr>
<tr>
<td>5.3 Faculty and Staff well-being And Satisfaction</td>
<td>30</td>
</tr>
<tr>
<td>6 Education and Support Process Management</td>
<td></td>
</tr>
<tr>
<td>6.1 Education Design and Delivery</td>
<td>60</td>
</tr>
<tr>
<td>6.2 Education Support Processes</td>
<td>40</td>
</tr>
<tr>
<td>7 School Performance Results</td>
<td></td>
</tr>
<tr>
<td>7.1 Student Performance Results</td>
<td>150</td>
</tr>
<tr>
<td>7.2 Student and Stakeholder Satisfaction Results</td>
<td>100</td>
</tr>
<tr>
<td>7.3 Faculty and Staff Results</td>
<td>100</td>
</tr>
<tr>
<td>7.4 7.4 School-Specific Results</td>
<td>100</td>
</tr>
<tr>
<td>TOTAL POINTS</td>
<td>1000</td>
</tr>
</tbody>
</table>

Figure 1.3. 1999 Education criteria for performance excellence-item listing.
Baldrige Award recipients in the business sector report outstanding results.

**Definition of Educational Quality**

Bogue and Saunders (1992) define educational quality as follows: "Quality is conformance to mission specification and goal achievement—within publicly accepted standards of accountability and integrity."

The first advantage of this definition is that it respects and affirms diversity of institutional missions and their historical and environmental settings. A second advantage is that the definition requires an operational expression of mission and goals. Here is the "promise and deliver" challenge for colleges and universities.

From those grand statements of intent that can be found in catalogues, the definition asks that institutions outline more clearly and specifically those knowledges, skills, and values they expect to be associated with their credentials and degrees. "What difference did we make?" is a question encouraged by this definition.

The clear definition of goal and mission in educational institutions are important for the clients to know, because according to that definition, expectations about services and the quality of academic performance
will be based on it. As Bogue and Sauder state on their third advantage, is that the definition of quality focuses debate on purpose—what the institution intends—so that arguments on quality—what it achieves—are not confounded over dissent that is actually related to purpose. Consensus building and partnership efforts are encouraged.

A fourth advantage of the definition is that it encourages public disclosure of institutional mission, goals, and performance results. The definition also promotes quality assurance as an exercise in learning and discovery.

A fifth advantage, in the author’s judgment, is that the definition contains an ethical test. In summary, this definition affirms the idea that there are varieties of excellence in both individual and institutional performance (Bogue and Saunders, 1992).

**What kind of community should higher education be?**

A 1990 publication of the Carnegie Foundation for the Advancement of Teaching is entitled *Campus Life: In Search of Community*. The question posed is what kind of community should higher education be? This special report speaks directly to questions of quality:
First, a college or university is an educationally purposeful community, a place where faculty and students share academic goals and work together to strengthen teaching and learning on the campus (p. 9).

Second, a college or university is an open community, a place where freedom of expression is uncompromisingly protected and where civility is powerfully affirmed. (p. 17).

Third, a college or university is a just community, a place where the sacredness of each person is honored and where diversity is aggressively pursued (p. 25).

Fourth, a college or university is a disciplined community, a place where individuals accept their obligations to the group and where well-defined governance procedures guide behavior for the common good. (p. 47).

Fifth, a college or university is a caring community, a place where the well-being of each member is sensitively supported and where service to others is encouraged. (p. 47).

Sixth, a college or university is a celebrative community, one in which the heritage of the institution is remembered and where rituals affirming both tradition and change are widely shared. (p. 55).

These tests of community are also tests of quality. Quality should be associated with any college or university as a learning community (Bogue and Saunders, 1992).

After reviewing the importance of measuring customer satisfaction in all service organizations, and understanding that what customers want and expect from service should be of primary concern of management, it is concluded that universities as service providers must
embark in the quest of customer satisfaction throughout the entire organization focusing, not only on academic excellence, but also incorporating excellence to all the administrative services that are offered to students and stakeholders.

"Customer satisfaction is not just another management fad or flavour of the month that is likely to disappear in the wake of the next 'big idea'. It is central to assessing past performance and predicting future financial success. Firms that treat customer satisfaction as a fad - and do not respond to the need for restructuring reorganizing, reallocating resources, and redesigning incentive plans to genuinely pursue customer satisfaction - will fall behind in the competition for tomorrow's customers" (Jamison, 1999).

Customers are the reason companies stay in business. Understanding drivers of customer satisfaction should therefore be a key management objective to achieve real competitive advantage. How? Assessing the most important service features; capturing customers' perception and expectations through surveys, identifying the gaps between the two.

Determining the areas considered critical by the customer in delivering high-quality service, enables organizations to focus on only the key drivers of
customer satisfaction construct and prioritise an action plan (Jamison, 1999).
CHAPTER 3

Methodology and Procedures

Introduction

This research was conducted in Santiago, Dominican Republic, at Pontificia Universidad Catolica Madre y Maestra (PUCMM) which holds a population of approximately 7,000 undergraduate and graduate students. Programs are offered during Fall, and Spring semesters as well as a summer section which is offered with approximately half of the student population.

Type of Investigation

This study is descriptive with a systematic sampling procedure. The primary objective is to identify whether mechanisms are in place by administrators at PUCMM to evaluate customer service and to determine students’ needs; also, student’s perception of customer service, and the use of feedback to implement quality customer service.

Population Sample

The population object of this study is divided in:

- Undergraduate students at PUCMM.
- Administrators from academic and administrative departments at PUCMM.
Research Instruments

To gather the data for this study, two basic resources were utilized: A two section questionnaire to evaluate students' satisfaction regarding customer service. To survey the administrators, the research instrument consisted of a two section questionnaire (See Appendix A, p. 88).

The questionnaires were administered in Spanish. Translated English versions of both administrators and students' questionnaires are attached in appendixes A and B, pages 88 and 89 respectively.

Students' Research Strategy

To determine students requirements, before designing the questionnaires, 20 students were surveyed to determine what students needs were at PUCMM. The answers were then analyzed in order to prepare a checklist of topics to include in the questionnaire designed to survey the students (See appendix C, p. 90). A five point Likert scale was designed for the students' questionnaire. The value rating from 1 - 5 was assigned to the items, with five being the one of highest score.

Example: 1. Never
2. Almost never
3. Sometimes
4. Almost never
5. Always
Administrative areas such as the Library, Admissions Office, the Registrars Office were central in this part of the study as these departments are frequented by students.

Questionnaire Sample. Part I:

1. LIBRARY:

2.1.1.1 The collection of books in the areas needed is updated.

   N  AN  S  AW  A
   1  2  3  4  5

2.1.1.2 Books are available for borrowing when needed.

   N  AN  S  AW  A
   1  2  3  4  5

2.1.1.3 Audiovisual aids are available for borrowing when needed.

   N  AN  S  AW  A
   1  2  3  4  5

2.1.1.4 The clerk is polite. (friendly)

   N  AN  S  AW  A
   1  2  3  4  5

2.1.1.5 You have to wait a long time for the clerk to take care of you. (The waiting period is reasonable)

   N  AN  S  AW  A
   1  2  3  4  5

2.1.1.6 The clerk is efficient (He/she shows knowledge in his/her area)

   N  AN  S  AW  A
   1  2  3  4  5

2.1.1.7 The clerk is apt to answer questions within his area of service, according to your needs.

   N  AN  S  AW  A
   1  2  3  4  5
2.1.1.8 The clerk knows where to send you if you need service from another department.

<table>
<thead>
<tr>
<th>N</th>
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2.1.1.9 Every semester you evaluate, through surveys, the quality of services you get.

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<th>N</th>
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2.1.1.10 Every semester you are evaluated to find out if your needs as student are being met.

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<th>N</th>
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2. REGISTRARS OFFICE

1.1.2.1 The clerks are polite. (friendly)

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<tr>
<th>N</th>
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2.1.2.2 I am helped promptly. (within reasonable time)

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<th>N</th>
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</table>

2.1.2.3 The clerk is efficient. (He/she shows knowledge in his/her area of competency).

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<tr>
<th>N</th>
<th>A</th>
<th>N</th>
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</table>

2.1.2.4 The clerk is apt to answer questions within his/her area of competency according to your needs.

<table>
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<tr>
<th>N</th>
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<th>N</th>
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<th>A</th>
<th>W</th>
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</table>

2.1.2.5 The clerk knows where to send you if you need service from another department.

<table>
<thead>
<tr>
<th>N</th>
<th>A</th>
<th>N</th>
<th>S</th>
<th>A</th>
<th>W</th>
<th>A</th>
</tr>
</thead>
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<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
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</tbody>
</table>

2.1.2.6 Every semester you evaluate, through surveys, the quality of services you get.

<table>
<thead>
<tr>
<th>N</th>
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<th>A</th>
<th>W</th>
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<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.1.2.7 You receive evaluations from this office to determine if your needs are being met.

N AN S AW A
1 2 3 4 5

3. ADMISSIONS OFFICE

1.1.3.1 The clerks are polite. (friendly)

N AN S AW A
1 2 3 4 5

1.1.3.2 I am helped promptly. (Within a reasonable time)

N AN S AW A
1 2 3 4 5

1.1.3.3 The clerk is efficient. (His/her performance show knowledge within his/her area of competency)

N AN S AW A
1 2 3 4 5

2.1.3.4 The clerk is apt to answer questions within his/her area of competency according to your needs.

N AN S AW A
1 2 3 4 5

2.1.3.5 The clerk knows where to send you if you need service from another department.

N AN S AW A
1 2 3 4 5

2.1.3.6 The quality of services was evaluated after contacting this office.

☐ Yes
☐ No
☐ Not sure

2.1.3.7 You are surveyed periodically by the Admissions Office with the purpose of finding out if your needs are being met.

☐ Yes
☐ No
☐ Not sure
The second section of the questionnaire was designed to determine whether or not students felt that their needs were measured and reflected in administrative actions.

Five questions were asked in the same manner using a Likert Scale. Two questions were asked with yes, no, not sure responses.

Example:

2.2.1 You are surveyed every semester as to the quality of services offered throughout the university.

N AN S AW A
1 2 3 4 5

2.2.2 Every semester you evaluate the professors as to their academic performance in all your classes.

N AN S AW A
1 2 3 4 5

2.2.3 You have participated in focal groups to evaluate the programs in your field of studies.

N AN S AW A
1 2 3 4 5

2.2.4 You have been surveyed by PUCMM administrators to find out what your needs are as a student.

N AN S AW A
1 2 3 4 5

2.2.5 Your parents or tutors have participated in focal groups at PUCMM to discuss and analyze your needs as a student.

☐ Yes
☐ No
☐ Not sure
2.2.6 You have participated with administrators from PUCMM in the analysis and discussions as to what students’ needs are.

☐ Yes
☐ No
☐ Not sure

2.2.7 How would you rate customer service as a whole?

☐ 1. very deficient
☐ 2. deficient
☐ 3. normal
☐ 4. good
☐ 5. very good
☐ 6. excellent

2.2.8 How would you rate faculty’s performance?

☐ 1. very deficient
☐ 2. deficient
☐ 3. normal
☐ 4. good
☐ 5. very good
☐ 6. excellent

2.2.9 How would you rate academic quality?

☐ 1. very deficient
☐ 2. deficient
☐ 3. normal
☐ 4. good
☐ 5. very good
☐ 6. excellent

Procedures

The following steps were taken to obtain the students’ population sample:

a) Computarized data which offered a listing of registered students at PUCMM, in the Santiago Campus, for the summer of the year 2000.
The sample population represented three faculties at PUCMM:

- Faculty of Social Sciences and Humanities
- Faculty of Health Sciences
- Faculty of Engineering Sciences

b) For the sample of students' population a representative random sampling was determined by utilizing the proposed formula by Fischer & Navarro (1992):

\[ n = \frac{Z^2 Npq}{e^2 (N-1) + Z^2 pq} \]

- \( Z \) = Standard normal variance
- \( P \) = Occurrence probability (success)
- \( q \) = No occurrence probability (failure) = \( 1 - p \)
- \( e \) = Maximum estimation error
- \( N \) = Population size
- \( n \) = Sample size

In this case, \( N = 3,852 \), \( p = 0.5 \), \( e = 0.06 \) and \( Z = 1.96 \) for a validity of 95 percent.

Therefore:

\[ n = \frac{(1.96)^2 (3,852)(0.5)(0.5)}{(0.06)^2 (3,852) + (1.96)^2 (0.5)(0.5)} = 249.50 \approx 250 \]

The sampling was distributed proportionally according to the size of the population registered in each program:

\[ \frac{n_i}{N_i} = \frac{n}{N} \Rightarrow n_i = \frac{n N_i}{N} \]

C) For the distribution of the students' questionnaire, different administrative as well as academic departments were contacted to determine where the largest population of students was gathered. With
the purpose of surveying students in the same manner, classrooms were visited.

Professors were approached in the classrooms to ask their permission to conduct the survey. Students from different programs were surveyed in their classrooms. Ten to fifteen minutes were allowed for the students to complete the surveys.

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>POPULATION</th>
<th>SAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Administration</td>
<td>488</td>
<td>31.67 = 32</td>
</tr>
<tr>
<td>Architecture</td>
<td>171</td>
<td>11.09 = 11</td>
</tr>
<tr>
<td>Accounting</td>
<td>99</td>
<td>6.4 = 6</td>
</tr>
<tr>
<td>Law</td>
<td>178</td>
<td>11.52 = 12</td>
</tr>
<tr>
<td>Education</td>
<td>499</td>
<td>32.38 = 32</td>
</tr>
<tr>
<td>Estomatology</td>
<td>218</td>
<td>14.14 = 14</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>268</td>
<td>17.39 = 17</td>
</tr>
<tr>
<td>Electromecanical Eng.</td>
<td>88</td>
<td>5.7 = 6</td>
</tr>
<tr>
<td>Industrial Engineering</td>
<td>425</td>
<td>27.5 = 28</td>
</tr>
<tr>
<td>Computer Science Engineering</td>
<td>128</td>
<td>8.3 = 8</td>
</tr>
<tr>
<td>Electronic Engineering</td>
<td>55</td>
<td>3.56 = 4</td>
</tr>
<tr>
<td>Telecommunication Eng.</td>
<td>119</td>
<td>7.7 = 7</td>
</tr>
<tr>
<td>Marketing</td>
<td>227</td>
<td>14.7 = 15</td>
</tr>
<tr>
<td>Medicine</td>
<td>721</td>
<td>46.7 = 47</td>
</tr>
<tr>
<td>Organizational Psicology</td>
<td>102</td>
<td>6.6 = 7</td>
</tr>
<tr>
<td>Physical Therapy</td>
<td>66</td>
<td>4.28 = 4</td>
</tr>
</tbody>
</table>

n = 3,852

n = 250

Figure 1.4. Students' Sample Distribution

Administrators' Research Strategy:

The evaluating instrument designed for the administrators survey consists of a two part questionnaire. The first part has a seven item section covering the evaluating mechanisms utilized by
administrators at PUCMM to determine students' needs.

A Likert scale with a rating value from 1 - 5 was designed, being five the one with the highest value.

Example:
1. never
2. hardly ever
3. sometimes
4. almost always
5. always

Item number 1.1.1 was assigned a different value rating due to the nature of the question in which one, always, was assigned the lowest rating value and five, never, the one with the highest value.

Example:
1. always
2. almost always
3. sometimes
4. hardly ever
5. never

Example of administrators' questionnaire. Part I:

1.1.1 You determine students' needs based on your intuition:

☐ 1. always
☐ 2) almost always
☐ 3) sometimes
☐ 4) hardly ever
☐ 5) never

1.1.2 You determine students' needs by interviewing them informally:

☐ 1) never
☐ 2) hardly ever
☐ 3) sometimes
☐ 4) almost always
☐ 5) always
1.1.3 You determine students' needs by administering questionnaires to them:

- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always

1.1.4 You determine the needs of students administering questionnaires to the administrative staff:

- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always

1.1.5 You determine students' needs by administering questionnaires to the faculty.

- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always

1.1.6 You determine students' needs interviewing the administrative staff.

- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always

1.1.7 You determine students' needs by means of analysis and discussions with focus groups constituted by professors, tutors and students.

- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always
The second part of the questionnaire covers administrators' use of feedback from evaluations to implement quality customer service, as well as the mechanisms used to measure students' satisfaction. This part has 11 items asked in the same manner in which number five, always, was assigned the highest value rating. Item number 1.2.5 was assigned a different value rating in which number one, always, was given the lowest value and number five, never, the highest value.

Item number 12, was designed as a control item. It evaluates the different mechanisms administrators utilize to determine students' needs. A six point check list format was designed due to the nature of the item.

Part 2:

1.2.1 Students evaluate faculty academic performance every semester to determine customer satisfaction.

- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always

1.2.2 Students evaluate administrative services every semester to determine customer satisfaction.

- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always
1.2.3 Students evaluate faculty every semester to determine academic quality.
- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always

1.2.4 Students evaluate administrative staff every semester to determine service quality.
- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always

1.2.5 Once the information is collected you save the data to be analyzed later.
- 1) always
- 2) almost always
- 3) sometimes
- 4) hardly ever
- 5) never

1.2.6 After evaluations, the data gathered is analyzed immediately to study possible actions.
- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always

1.2.7 Once the data is analyzed you involve the staff under your supervision to discuss possible solutions if needed.
- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always
1.2.8 Once the data is analyzed you meet with a group of students to inform them your findings.

☐ 1) never
☐ 2) hardly ever
☐ 3) sometimes
☐ 4) almost always
☐ 5) always

1.2.9 Once the data is analyzed you involve the students in the discussion and analysis of new strategies if necessary.

☐ 1) never
☐ 2) hardly ever
☐ 3) sometimes
☐ 4) almost always
☐ 5) always

1.2.10 As a result from discussions and analysis with focus groups, you implement new strategies if necessary.

☐ 1) never
☐ 2) hardly ever
☐ 3) sometimes
☐ 4) almost always
☐ 5) always

1.2.11 You motivate the staff under your supervision to integrate to the new plan or strategies.

☐ 1) never
☐ 2) hardly ever
☐ 3) sometimes
☐ 4) almost always
☐ 5) always

12. From the following alternatives which one(s) do you use to determine students' needs:

☐ 1. The intuition.
☐ 2. Informal interviews to students.
☐ 3. Interviewing faculty.
☐ 4. Interviewing staff from different departments.
☐ 5. Questionnaires given to students.
☐ 6. Focus groups constituted by students, tutors, administrative staff and faculty.
To prove the validity of the designed tool, before surveying the administrators at PUCMM, a preliminary test was conducted; eight administrators were surveyed at Universidad Tecnologica de Santiago (UTESA).

**Procedures**

To determine the population of academic and administrative directors at PUCMM, 18 out of 50 administrators were chosen randomly. For the selection of this population we consulted the school directory listing of departments at PUCMM; questionnaires were distributed using inter-office mail. A returned address envelope with a letter explaining the purpose of the study was included. Sixteen questionnaires were returned by administrators using the same means. Two academic directors contacted the researcher to excuse themselves for not completing the survey because, according to them, most of the items on the questionnaire did not apply to their departments.

**Data analysis**

The analyses of this investigation are based on descriptive statistics, presented by Tables and Figures representing the mean scores and standard deviations, which answer the research questions of this study. The Software for the Purpose of Social Sciences (SPSS), version 8.0, was used for the statistical analysis.
Chapter 4

Results and discussion

The purpose of this chapter is to describe the data, the results of the scale utilized, the statistical analysis as well as discuss the findings. The summaries of the analysis of the data represented by Tables and Figures with their corresponding descriptions are presented. In the discussion, the following research questions are addressed:

- What specific mechanisms are in place to measure customer satisfaction?
- What evaluating mechanisms are in place to determine students’ needs?
- Is feedback utilized to implement quality customer service?
- How do students perceive customer service at PUCMM?

Table 1 shows a complete view of the specific contents of the answers given by administrators at PUCMM. The designed scale measures utilization of mechanisms by the academic and administrative staff to determine students’ needs.

Item 1.1.4, asks if administrators determine the needs of students by administering questionnaires to the administrative staff; the lowest mean score is 1.75. Item 1.1.5 asks if administrators determine students’ needs by administering questionnaires to the faculty; the
highest mean score is 3.56. It is important to state that the overall mean score is 2.63.

Table 1

Evaluating mechanisms used by administrators at PUCMM to determine students' needs.

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.1 You determine students' needs by the intuition based on your professional experience.</td>
<td>2.94</td>
<td>0.77</td>
</tr>
<tr>
<td>1.1.2 You determine students' needs by interviewing them informally.</td>
<td>3.25</td>
<td>0.77</td>
</tr>
<tr>
<td>1.1.3 You determine students' needs by administering questionnaires to them.</td>
<td>2.56</td>
<td>1.26</td>
</tr>
<tr>
<td>1.1.4 You determine the needs of students administering questionnaires to the administrative staff.</td>
<td>1.75</td>
<td>0.93</td>
</tr>
<tr>
<td>1.1.5 You determine students' needs by administering questionnaires to the faculty.</td>
<td>3.56</td>
<td>0.73</td>
</tr>
<tr>
<td>1.1.6 You determine students' needs interviewing the administrative staff.</td>
<td>2.25</td>
<td>1.00</td>
</tr>
<tr>
<td>You determine students' needs by means of analysis and discussions with focus groups constituted by professors, tutors and students.</td>
<td>2.13</td>
<td>1.31</td>
</tr>
</tbody>
</table>

n = 16  
\[ \bar{x} = 2.63 \quad s = 0.65 \]

Scale used to measure items:
1.1.1 1. always
2. almost always
3. sometimes
4. hardly ever
5. never

1.1.2 - 1.1.7 1. never
2. hardly ever
3. Sometimes
4. almost always
5. always

Table 2 represents the mean scores and standard deviations which answer the Research Question: Is feedback utilized to implement quality customer service? As can be observed item 1.2.4, which asks if students evaluate administrative staff every semester to determine service quality, the lowest mean score is 1.88. On the other hand, item 1.2.3, which asks if students evaluate administrative faculty every semester to determine
academic quality, the highest mean score is 4.69. Here the overall mean score is 3.30.

Table 2

Apreciation of administrators use of feedback

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2.1 Students evaluate faculty academic performance every semester to determine customer satisfaction.</td>
<td>4.31</td>
<td>1.20</td>
</tr>
<tr>
<td>1.2.2 Students evaluate administrative services every semester to determine customer satisfaction.</td>
<td>2.00</td>
<td>1.15</td>
</tr>
<tr>
<td>1.2.3 Students evaluate faculty every semester to determine academic quality.</td>
<td>4.69</td>
<td>0.48</td>
</tr>
<tr>
<td>1.2.4 Students evaluate administrative staff every semester to determine service quality.</td>
<td>1.88</td>
<td>1.20</td>
</tr>
<tr>
<td>1.2.5 Once the information is collected you save the data to be analyzed later.</td>
<td>2.63</td>
<td>1.67</td>
</tr>
<tr>
<td>1.2.6 After evaluations, the data gathered is analyzed immediately to study possible actions.</td>
<td>4.06</td>
<td>1.18</td>
</tr>
<tr>
<td>1.2.7 Once the data is analyzed you involve the staff under your supervision to discuss possible solutions if needed.</td>
<td>3.94</td>
<td>0.77</td>
</tr>
<tr>
<td>1.2.8 Once the data is analyzed you meet with a group of students to inform them your findings.</td>
<td>2.00</td>
<td>1.10</td>
</tr>
<tr>
<td>1.2.9 Once the data is analyzed you involve the students in the discussion and analysis of new strategies if necessary.</td>
<td>2.50</td>
<td>0.97</td>
</tr>
<tr>
<td>1.2.10 As a result from discussions and analysis with focus groups, you implement new strategies if necessary.</td>
<td>3.69</td>
<td>1.20</td>
</tr>
<tr>
<td>1.2.11 You motivate the staff under your supervision to integrate to the new plans or strategies.</td>
<td>4.63</td>
<td>0.81</td>
</tr>
</tbody>
</table>

n = 16

\[ x = 3.30 \quad s = 1.23 \]

Scale used for Item 1.2.5

1. Always
2. Almost always
3. Sometimes
4. Hardly ever
5. Never

Scale to measure items 1.2.1. - 1.2.11

1. Never
2. Hardly ever
3. Sometimes
4. Almost always
5. Always

Figure 1 represents item No. 12 (See Appendix A, p. 88), which is designed as a control item in the administrators' questionnaire. It gives a general view of the mechanisms utilized by administrators at PUCMM to determine students' needs. The results indicate that 12.50% interview staff from different departments and
68.80% interview faculty; these percentages indicate the lowest and highest mechanisms to determine students' needs.

![Pie chart showing distribution of evaluation methods.]

**Figure 1.** Evaluations at PUCMM to determine students' needs.

**Students' results**

Item 2.1.2.10 asks if students are evaluated every semester to find out if their needs as students are being met; the lowest mean score is 1.56. Item 2.1.2.6 asks if the clerks at the Library are efficient; the highest mean score is 3.92. In this case, the overall mean score in Table 3 is 3.25.
Table 3

Customer satisfaction at the Library of PUCMM.

<table>
<thead>
<tr>
<th>Library</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.2.1 The collection of books in the areas needed is updated.</td>
<td>3.11</td>
<td>1.12</td>
</tr>
<tr>
<td>2.1.2.2 Books are available for borrowing when needed.</td>
<td>3.29</td>
<td>0.95</td>
</tr>
<tr>
<td>2.1.2.3 Audiovisual aids are available for borrowing when needed.</td>
<td>3.68</td>
<td>0.93</td>
</tr>
<tr>
<td>2.1.2.4 The clerk is polite (friendly).</td>
<td>3.89</td>
<td>0.96</td>
</tr>
<tr>
<td>2.1.2.5 You have to wait a long time for the clerk to take care of you. (The waiting period is reasonable)</td>
<td>3.65</td>
<td>0.92</td>
</tr>
<tr>
<td>2.1.2.6 The clerk is efficient. (He/she shows knowledge in his/her area)</td>
<td>3.92</td>
<td>0.87</td>
</tr>
<tr>
<td>2.1.2.7 The clerk is apt to answer questions within his area of service, according to your needs.</td>
<td>3.53</td>
<td>1.05</td>
</tr>
<tr>
<td>2.1.1.8 The clerk knows where to send you if you need service from another department.</td>
<td>3.91</td>
<td>0.96</td>
</tr>
<tr>
<td>2.1.2.9 Every semester you evaluate, through surveys, the quality of services you get.</td>
<td>2.00</td>
<td>1.33</td>
</tr>
<tr>
<td>2.1.2.10 Every semester you are evaluated to find out if your needs as student are being met.</td>
<td>1.56</td>
<td>0.96</td>
</tr>
</tbody>
</table>

\[ n = 250 \quad \bar{x} = 3.25 \quad s = 0.83 \]

Scale used to measure items 2.1.1.1 - 2.1.1.10

1. never
2. almost never
3. sometimes
4. almost always
5. always

As can be seen in Table 4, the lowest mean score is 1.72; it refers to item 2.1.2.7 which asks if students receive evaluations at the Registrars' Office to determine if their needs are being met. It is considered important to highlight that item 2.1.2.6, which asks if students are surveyed as to the quality of service they get at the Registrars Office, resulted with a low mean score, 1.81. The highest mean score is 4.26; it refers to item 2.1.2.5 which asks if the clerk knows where to
refer the student if he/she needs service from other departments at PUCMM. Here, the overall mean score is 3.33.

Table 4

Customer satisfaction of at the Registrars Office.

<table>
<thead>
<tr>
<th>Registrars Office</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.2.1 The clerks are polite. (friendly)</td>
<td>3.88</td>
<td>0.96</td>
</tr>
<tr>
<td>2.1.2.2 I am helped promptly. (within reasonable time)</td>
<td>3.59</td>
<td>1.04</td>
</tr>
<tr>
<td>2.1.2.3 The clerk is efficient. (He/she shows knowledge in his/her area.)</td>
<td>4.07</td>
<td>0.84</td>
</tr>
<tr>
<td>2.1.2.4 The clerk is apt to answer questions within his/her area of competence</td>
<td>4.04</td>
<td>0.92</td>
</tr>
<tr>
<td>2.1.2.5 The clerk knows where to send you if you need service from another</td>
<td>4.26</td>
<td>0.90</td>
</tr>
<tr>
<td>2.1.2.6 Every semester you evaluate, through surveys, the quality of services</td>
<td>1.81</td>
<td>1.27</td>
</tr>
<tr>
<td>2.1.2.7 You receive evaluations from this office to determine if your needs are</td>
<td>1.72</td>
<td>1.17</td>
</tr>
<tr>
<td>2.1.2.8 The clerk knows where to refer students if they need service from</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale used to measure items 2.1.2.1 - 2.1.2.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. never</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. almost never</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. sometimes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. almost always</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. always</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This section of the survey consists of two parts, Table 5 and Table 5.1. The results in Table 5 are described first, and later the results in Table 5.1.

In Table 5, the lowest mean score is 3.74 for item 2.1.3.2, which asks if students are helped promptly (within reasonable time). Item 2.1.3.5 resulted with the highest mean score, 4.14; it asks if the clerk knows where to refer students if they need service from another department.
### Table 5

Customer Satisfaction at the Admissions Office.

<table>
<thead>
<tr>
<th>Admissions Office</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.3.1 The clerks are polite. (friendly)</td>
<td>4.05</td>
<td>0.94</td>
</tr>
<tr>
<td>2.1.3.2 I am helped promptly. (Within a reasonable time)</td>
<td>3.74</td>
<td>0.96</td>
</tr>
<tr>
<td>2.1.3.3 The clerk is efficient. (His/her performance shows knowledge within his/her area)</td>
<td>4.10</td>
<td>0.83</td>
</tr>
<tr>
<td>2.1.3.4 The clerk is apt to answer questions within his/her area of competence according to your needs.</td>
<td>4.09</td>
<td>0.91</td>
</tr>
<tr>
<td>2.1.3.5 The clerk knows where to send you if you need service from another department.</td>
<td>4.14</td>
<td>1.02</td>
</tr>
</tbody>
</table>

N = 250

\[ \bar{x} = 4.02 \quad s = 0.16 \]

Scale used to measure items 2.1.3.1 - 2.1.3.5

1. never
2. almost never
3. sometimes
4. almost always
5. always

In Table 5.1, 112 students (44.8% of the sample population) answered “no” to item 2.1.3.6, which asks if the quality of service is evaluated after visiting the Admissions Office. 71 students (28.4%) answered “yes” to the same question. 154 students (61.6%) answered “no” to item 2.1.3.7, which asks if students are surveyed periodically by the Admissions Office to find out if their needs are being met. 60 students (24%) answered “yes” to the same question.
Table 5.1

Customer satisfaction at the Admissions Office.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
<th>Not Response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>71</td>
<td>112</td>
<td>59</td>
<td>8</td>
<td>250</td>
</tr>
<tr>
<td>%</td>
<td>28.4</td>
<td>44.8</td>
<td>23.6</td>
<td>3.2</td>
<td>100</td>
</tr>
<tr>
<td>Frequency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>60</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24.0</td>
</tr>
</tbody>
</table>

2.1.3.6 The quality of service was evaluated after contacting the Admissions Office.
2.1.3.7 You are surveyed periodically by the Admissions Office with the purpose of finding out if your needs are being met.

In Figure 2, a high mean score (4.42) can be observed in the item that asks if students evaluate professors every semester with regard to their academic performance in all their classes. Nevertheless, Figure 2 shows a low mean score (1.44) in the item that makes reference to students' participation in focus groups to evaluate programs in their fields of study. Another low mean score is presented by the item that asks if students have been surveyed by PUCMM administrators to find out if their needs as students, are being met (1.29).
Figure 2. Evaluations in place at PUCMM.

Table 6 represents items 2.2.5 and 2.2.6 of the students' questionnaire; due to the design of the questions, the results are being presented in a separate Table. 233 (93.2% of the sample population) responded “no” to item 2.2.5 which asks if students' parents or tutors have participated in focus groups at PUCMM to discuss and analyze their needs as students. Only 3 students (1.2%) responded “yes” to the same question. 224 students (89.6% of students sample population) responded “no” to item 2.2.6 which asks if students have participated with administrators from PUCMM in the analysis and discussions regarding students' needs.
Table 6

Students needs are measured.

<table>
<thead>
<tr>
<th>n = 250</th>
<th>2.2.5 Your parents or tutors have participated in focus groups at PUCMM to discuss and analyze your needs as a student</th>
<th>2.2.6 You have participated with administrators from PUCMM in the analysis and discussions as to what students' needs are.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Frequency</td>
<td>3</td>
</tr>
<tr>
<td>No</td>
<td>Frequency</td>
<td>233</td>
</tr>
<tr>
<td>Not sure</td>
<td>Frequency</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>Frequency</td>
<td>250</td>
</tr>
</tbody>
</table>

Results in Figure 3 show that 32.40% of the students' sample population perceives customer service as "normal". This percentage is the highest score in the variable customer satisfaction. 24% consider customer service "good"; 22% rated the service as "deficient"; 14.80% "very deficient", and 2.80% believe that customer service is excellent.
Figure 3. Students’ perception of customer service at PUCMM.
Table 7

Questions and results presented in Figure 4.

<table>
<thead>
<tr>
<th>Question</th>
<th>Students results</th>
<th>Administrators results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q.1. Evaluations are administered every semester as to the quality of services at PUCMM.</td>
<td>X = 2.23</td>
<td>X = 1.88</td>
</tr>
<tr>
<td>Q.2. Every semester students evaluate faculty as to their academic performance in every class.</td>
<td>X = 4.32</td>
<td>X = 4.31</td>
</tr>
<tr>
<td>Q.3. Students needs are determined by mean of analyses and discussions with focus groups.</td>
<td>X = 1.29</td>
<td>X = 2.56</td>
</tr>
<tr>
<td>Q.4. Students are surveyed by administrators at PUCMM to find out what their needs are.</td>
<td>X = 2.04</td>
<td>X = 2.13</td>
</tr>
<tr>
<td>Q.5. Students have participated with administrators from PUCMM in the analysis and discussions as to what their needs are.</td>
<td>X = 1.95</td>
<td>X = 2.50</td>
</tr>
</tbody>
</table>

Figure 4 contains the results of five questions (see Table 7) asked to students and administrators. There are differences between students and administrators responses to items 1, 3 and 5. Nevertheless, both, students and administrators' answers in item 2 resulted with similar mean scores, 4.32 and 4.31, respectively. The answers to Question 4 also resulted with similar scores, 2.04 and 2.13 in that order.

![Figure 4. Comparative chart.](image-url)
Discussion

In this section, four research questions will be discussed.

Research question 1: What specific mechanisms are in place to measure customer satisfaction?

Administrators’ answers to the questions that ask if evaluations are in place to determine service quality and to measure customer satisfaction at PUCMM show a low tendency as illustrated by the results in the Tables and Figures containing this information. According to the results, the only evaluation in place to measure customer satisfaction is the survey done by students to evaluate faculty’s performance and academic quality every semester.

Students’ responses in regard to the mechanisms in place to measure customer satisfaction in different service departments, such as the Library, the Registrars Office, and the Admissions Office, were significantly low, as displayed in Tables 3, 4 and 5.1. The results in Figure 2 also corroborate with the lack of evaluating mechanisms in all departments at PUCMM, except for the evaluation done to survey faculty’s performance and academic quality every semester, as stated previously.

As the findings indicate, administrators at PUCMM do not seem to realize the importance of evaluating customer
service and customer satisfaction at all levels, in all departments of the institution. This behavior supports what was stated earlier in this study, "the highly trained professionals filling a variety of faculty, administrative and even staff positions in colleges and universities can have difficulty thinking of them in a service role".

Similarly, Albrecht (1992) notes that educators may be the last people to adopt a service orientation toward people they are supposed to serve. Although faculty members, administrators, and staff perform distinct duties, they must be conscious of their roles in educational institutions: "to make the difference and to serve students' interests".

Administrators in higher education in the Dominican Republic should understand the importance of embracing service management principles, emphasizing service quality, and customer satisfaction. The importance of detecting students' expectations and perception, through surveys, is also significant, thus providing the institution with feedback to improve service quality and customer satisfaction.

To provide administrators with some criteria being embraced in higher education in the United States, a few systems for quality assurance are mentioned in this
study. A system to assess and measure performance, allows educational organizations identify strengths and weaknesses and to target opportunities for improvement on processes and results affecting all key stakeholders including students, faculty, staff, and the community.

It is also considered important to point out, as the results indicate, that there is very little involvement of administrative staff and faculty in measuring customer satisfaction at PUCMM. As Fitzsimmons (1998) establishes, the human element is central to effective operation in the service industry. Employees are key in the service system, they are considered internal customers, the ones who deliver the "service package. Employees, consequently, should also have a performance measurement and reward system to help the organization communicate its strategic priorities and highest values, as well as a clear definition of the institution’s mission. Clear purpose and supporting values are integral to great service (Fitzsimmons, 1998).

**Research Question 2:** What evaluating mechanisms are in place to determine students’ needs?

There are few evaluations in place to determine students’ needs. It is noteworthy to highlight the result of the overall mean score of 2.63, which answer
the questions as to what are the evaluations in place to determine students' needs.

The highest mean score of 3.56, which asks if administrators determine students' needs by administering questionnaires to the faculty, is an indication that administrators are not conscious of the importance of involving all employees equally in the process of determining customers' needs. The lowest mean score of 1.75, asking if administrators determine the needs of students by administering questionnaires to the administrative staff, substantiate the stated before.

It is essential to highlight the result of the variable "use of the intuition" by administrators to determine the needs of students (56.30%); it is also important to draw attention to the result, (12.50%) which refers to the variable "interview staff" from different departments to find out students' needs. These scores point to the lack of understanding from management at PUCMM, as to how important it is to utilize Service Management principles in their operational system to be able to deliver quality service.

To support what it is mentioned above, students responses to the variable "evaluating mechanisms" to determine students' needs at the Library, resulted with the lowest mean score, 1.56; at the Registrars Office,
At the Admissions Office, 154 (61.6%) students answered “no” to the same question; 60 (24%) answered “yes”; 29 (11.6%) answered “not sure”; 7 (2.8%) did not respond.

In Figure 2, the results to the question: “you have been surveyed by PUCMM administrators to find out what your needs are as a student”, also resulted with low scores (1.29 and 1.44).

There is contrast between the answers of students and administrators regarding evaluations to determine students’ needs as shown in Figure 4. For instance, students response to item 3, which asks if students needs are determined by mean of analyses and discussions in focus groups, resulted with a mean score of 1.29; by contrast, administrators’ answer to the same item resulted with a mean score of 2.56. Item 4, which also asks if students are surveyed by administrators to find out what their needs are, resulted with a small difference; the result for students’ answer scored 2.04 and administrators’ result was 2.13. Item 5, “students have participated with administrators from PUCMM in the analysis and discussions as to what their needs are”, resulted with a mean score of 2.95 in the students’ questionnaire, and in the administrators’ questionnaire the same item resulted with a mean score of 2.50.
As revealed by the results of the surveys, there is not a systematic approach to find out students’ needs at PUCMM. Moreover, as demonstrated by the comparison made in Figure 4 between some of the answers given by students and administrators, there seems to be confusion between the two in regard to the evaluations in place at PUCMM to determine the needs of the students.

It is important that administrators understand the significance of determining the needs of the students. According to Hayes, (1998) identifying customers’ requirements is essential for two reasons: First, it provides a better understanding of the way customers define the quality of services and products. Second, knowledge of customer requirements will assess to what extent customers are satisfied on each of the quality dimensions.

Deming asserts that quality is a relative term that will change in meaning depending on the customers’ needs. Managers must be aware of the importance of consumer research, statistical theory, statistical thinking, and the application of statistical methods to processes.

**Research Question 3:** Is feedback utilized to implement quality customer service?

According to the results in table 2, administrators believe that feedback is used to implement quality
customer service. Nonetheless, by reviewing the findings of the variable: "use of evaluating mechanisms", it was concluded that there are few evaluations in place at PUCMM to measure customer satisfaction; therefore, it is thought that there is ambiguity of the answers given by administrators as to the use of feedback to implement service quality at PUCMM.

To illustrate further, administrators' answer to the question "evaluations are administered every semester as to the quality of services at PUCMM", resulted with a mean score of 1.88. Another answer that resulted with a low mean score, thus indicating few evaluations in place at PUCMM, was the one that asks whether students evaluate administrative services every semester to determine customer satisfaction (2.00). As it is understood, administrators might be referring to the use of feedback from the evaluations done to faculty members.

Research Question 4: How do students perceive customer service at PUCMM?

The highest result, 32.40% of the students' sample population rated "customer service as a whole" as "normal". The Merriam Webster Dictionary defines the term "normal" as being standard or average. Only 2.8% rated customer service as excellent.
As the results indicated, there is very little students’ involvement in discussions and decision making at PUCMM. In addition, as it was also seen throughout the study, there are not evaluations in place to identify students’ needs.

To improve service delivery, it is necessary to find out customers’ expectations and perceptions and then identify the gaps that might exist between administrators’ perception of what they might believe customers want, vs. customers’ actual needs. Measuring the gaps between expected services and perceived services is a routine customer feedback process that is practiced by leading companies (Fitzsimmons, 1998).

Recognizing the need to measure customer service, valid and distinct measures of service quality have been developed by a team of US scholars (Parassuraman, Zeithaml and Berry). It starts by defining expected service: “what consumers feel a service provider should offer”, and perceived service: “customer perceptions of the firm providing their service”. The gap between the two constructs generates service quality (Jamison, 1999).
CHAPTER 5

Recommendations

The following is recommended:

1. The creation of a system to develop an organizational service culture in which all employees, as internal customers, and students as external customers, are involved, generating a team with shared vision and mission.

James Chitwood (1996) in his "Service Prescription for Change" (p.19) states that an institutional understanding of the service role of the university or college and the development of a "service management" philosophy are the initial steps an organization must take toward building a customer service orientation. Service management, according to Albrecht (p.21), seeks to build a service culture that makes excellent service to the customer a recognized mission for everyone in the organization.

In proposing an integrated system of policies, programs and initiatives focusing on customer service, Sobel and Hines (1990) suggest the following components which are adapted for use by colleges or universities:

- A set of statements that present the college's philosophy and expectations for effective customer relations.
• An assessment method must be used to measure the current level of customer service to serve as a base for determining the impact of other system element and monitor customer service trends.

• Clarify roles and responsibility of faculty, administration and staff personnel in regards to customer relations and articulate a customer communication plan.

• Build an institutional identity with and expectations about customer service through human resource management’s recruitment, selection, hiring, and orientation with new personnel.

• Emphasize training to develop employee’s knowledge, skills and attitudes in customer service.

• Communicate attention toward customer relations and supply feedback on how the institution is accomplishing its service objectives.

Another ingredient in building the attitude for customer service is that college personnel from the maintenance staff to the chemistry professor must think of and treat each student as an appreciating asset (Peters, 1988).

As Crosby, Deming and Juran agree, it is management’s responsibility to establish an organizational culture in which commitment to quality is the main focus. The mission of the organization must be clear to everyone, and every management action must lead to fulfillment of that mission. This culture should be
characterized by commitment from the top of the organization. They also agree that continuous education and training at all levels is necessary to foster a common language of quality and to develop employee skills and knowledge. Effective communication, cooperation, and teamwork throughout the organization are essential. They agree that more than 85 percent of all problems associated with quality can be attributed to management policies or actions. This means that management action is required to achieve improvements.

They also concur that the pursuit of customer-focused quality is a long-term process that will not produce results overnight. The improvements will be evident over time in terms of reduced costs, but more importantly, organizations will eventually be able to anticipate and prevent problems. The approaches do not represent programs in the usual sense of the word; they do not have starting and ending dates. These are management philosophies aimed at long-term improvements through adoption of strategic planning for quality.

These philosophies have been implemented over the years in various organizations in different countries. As philosophies they go beyond the economic concerns of an organization and address organization's employees as well. They give high priority to pride and workmanship,
education, and the work environment as well as to team building, teamwork, cooperation, and participation, all essential to cultural change.

For a satisfactory service encounter the need and the control of management, employees and customers should be balanced. Employees should have a performance measurement and reward system to help the company communicate its strategic priorities and highest values. Clear purpose and supporting values are integral to great service (Fitzsimmons, 1994).

2. Adopting some of the systems for quality assurance that have been embraced in higher education in the United States to measure customer satisfaction. For example, The Malcolm Baldrige National Quality Award that provides a valuable framework for performance excellence. By adopting some systems presented in this study, it is believed that educational institutions in the Dominican Republic will be able to improve institutional performance.

3. Further studies in other educational institutions of higher education in the Dominican Republic are recommended.
REFERENCES


Appendix A

Evaluation to administrators

English and Spanish versions
We are carrying out an investigation for the thesis in the Service Management Program at Rochester Institute of Technology (RIT), Rochester, New York.

Your collaboration responding this questionnaire will be of great help to us. We thank you in advance.

1. Evaluating mechanisms utilized by administrators at PUCMM to determine students’ needs.

1.1.1 You determine students’ needs based on your intuition or/and on your professional experience:

- 1. always
- 2) almost always
- 3) sometimes
- 4) hardly ever
- 5) never

1.1.2 You determine students’ needs by interviewing them informally:

- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always

1.1.3 You determine students’ needs by administering questionnaires to them:

- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always

1.1.4 You determine the needs of students administering questionnaires to the administrative staff:

- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always

1.1.5 You determine students’ needs by administering questionnaires to the faculty:

- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always

1.1.6 You determine students’ needs interviewing the administrative staff:

- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always
1.1.7 You determine students' needs by means of analysis and discussions with focal groups constituted by professors, tutors and students:

☐ 1) never
☐ 2) hardly ever
☐ 3) sometimes
☐ 4) almost always
☐ 5) always

2. Utilization of feedback from evaluations to determine students' needs.

1.2.1 Students evaluate faculty academic performance every semester to determine customer satisfaction:

☐ 1) never
☐ 2) hardly ever
☐ 3) sometimes
☐ 4) almost always
☐ 5) always

1.2.2 Students evaluate administrative services every semester to determine customer satisfaction:

☐ 1) never
☐ 2) hardly ever
☐ 3) sometimes
☐ 4) almost always
☐ 5) always

1.2.3 Students evaluate faculty every semester to determine academic quality:

☐ 1) never
☐ 2) hardly ever
☐ 3) sometimes
☐ 4) almost always
☐ 5) always

1.2.4 Students evaluate administrative staff every semester to determine service quality:

☐ 1) never
☐ 2) hardly ever
☐ 3) sometimes
☐ 4) almost always
☐ 5) always

1.2.5 Once the information is collected you save the data to be analyzed later:

☐ 1) always
☐ 2) almost always
☐ 3) sometimes
☐ 4) hardly ever
☐ 5) never

1.2.6 After evaluations, the data gathered is analyzed immediately to study possible actions:

☐ 1) never
☐ 2) hardly ever
☐ 3) sometimes
☐ 4) almost always
☐ 5) always
1.2.7 Once the data is analyzed you involve the staff under your supervision to discuss possible solutions if needed:

- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always

1.2.8 Once the data is analyzed you meet with a group of students to inform them your findings:

- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always

1.2.9 Once the data is analyzed you involve the students in the discussion and analysis of new strategies if necessary:

- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always

1.2.10 As a result from discussions and analysis with focal groups, you implement new strategies if necessary:

- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always

1.2.11 You motivate the staff under your supervision to integrate to the new plan or strategies:

- 1) never
- 2) hardly ever
- 3) sometimes
- 4) almost always
- 5) always

12. From the following alternatives which one(s) do you utilize to determine students’ needs:

- 1. The intuition.
- 2. Informal interviews to students.
- 3. Interviewing faculty.
- 4. Interviewing staff from different departments.
- 5. By questionnaires given to students.
- 6. Focal groups constituted by students, tutors, administrative staff and faculty.

THANK YOU!
EVALUACION A LOS ADMINISTRADORES DE
LA PONTIFICIA UNIVERSIDAD CATOLICA MADRE Y MAESTRA
SANTIAGO, R.D.

Estamos llevando a cabo una investigación para la tesis de maestría en Gerencia de Servicios en Rochester Institute of Technology (RIT), Rochester, New York.

Su colaboración al responder este cuestionario será de gran ayuda para nosotros. Gracias anticipadas.

1. Métodos de evaluación utilizados por administradores para determinar las necesidades de los estudiantes.

1.1.1 Usted determina las necesidades de los estudiantes por la intuición basada en su experiencia profesional.

- 1. Siempre
- 2. Casi siempre
- 3. Algunas veces
- 4. Casi nunca
- 5. Nunca

1.1.2 Usted determina las necesidades de los estudiantes mediante entrevistas informales a los mismos:

- 1. Nunca
- 2. Casi nunca
- 3. Algunas veces
- 4. Casi siempre
- 5. Siempre

1.1.3 Usted determina las necesidades de los estudiantes aplicando cuestionarios a los mismos.

- 1. Nunca
- 2. Casi nunca
- 3. Algunas veces
- 4. Casi siempre
- 5. Siempre

1.1.4 Usted determina las necesidades de los estudiantes aplicando cuestionarios al personal administrativo.

- 1. Nunca
- 2. Casi nunca
- 3. Algunas veces
- 4. Casi siempre
- 5. Siempre

1.1.5 Usted determina las necesidades de los estudiantes entrevistando al personal docente.

- 1. Nunca
- 2. Casi nunca
- 3. Algunas veces
- 4. Casi siempre
- 5. Siempre

1.1.6 Usted determina las necesidades de los estudiantes entrevistando al personal administrativo.

- 1. Nunca
- 2. Casi nunca
- 3. Algunas veces
- 4. Casi siempre
- 5. Siempre
1.1.7 Usted determina las necesidades de los estudiantes por medio de análisis y discusiones con grupos focales constituidos por profesores, personal administrativo, tutores y estudiantes:

- 1. Nunca
- 2. Casi nunca
- 3. Algunas veces
- 4. Casi siempre
- 5. Siempre

2. Utilización de retroalimentación de evaluaciones aplicadas para determinar las necesidades de los estudiantes.

1.2.1 Los estudiantes evalúan la actuación académica de los profesores todos los semestres para determinar la satisfacción del cliente.

- 1. Nunca
- 2. Casi nunca
- 3. Algunas veces
- 4. Casi siempre
- 5. Siempre

1.2.2 Los estudiantes evalúan los servicios administrativos todos los semestres para determinar la satisfacción del cliente.

- 1. Nunca
- 2. Casi nunca
- 3. Algunas veces
- 4. Casi siempre
- 5. Siempre

1.2.3 Los estudiantes evalúan a los profesores todos los semestres para medir la calidad docente.

- 1. Nunca
- 2. Casi nunca
- 3. Algunas veces
- 4. Casi siempre
- 5. Siempre

1.2.4 Los estudiantes evalúan al personal administrativo todos los semestres para medir la calidad de los servicios.

- 1. Nunca
- 2. Casi nunca
- 3. Algunas veces
- 4. Casi siempre
- 5. Siempre

1.2.5 Una vez recolectada la información usted almacena los datos para ser analizados luego:

- 1. Siempre
- 2. Casi siempre
- 3. Algunas veces
- 4. Casi nunca
- 5. Nunca
.2.6 Una vez recolectada la información analiza los datos inmediatamente para estudiar posibles acciones:

- 1. Nunca
- 2. Casi nunca
- 3. Algunas veces
- 4. Casi siempre
- 5. Siempre

.2.7 Una vez recolectada la información usted **involucra al personal** bajo su dependencia **para discutir posibles acciones** si es necesario.

- 1. Nunca
- 2. Casi nunca
- 3. Algunas veces
- 4. Casi siempre
- 5. Siempre

1.2.8 Una vez recolectada la información usted se reúne con grupos de estudiantes para informarles sus hallazgos.

- 1. Nunca
- 2. Casi nunca
- 3. Algunas veces
- 4. Casi siempre
- 5. Siempre

1.2.9 Una vez recolectada la información **involucra a los estudiantes** en discusiones y análisis para estudiar nuevas estrategias si fuese necesario.

- 1. Nunca
- 2. Casi nunca
- 3. Algunas veces
- 4. Casi siempre
- 5. Siempre

1.2.10 Como resultado de discusiones y análisis con grupos focales y el personal bajo su dependencia, usted implementa nuevas estrategias si es necesario.

- 1. Nunca
- 2. Casi nunca
- 3. Algunas veces
- 4. Casi siempre
- 5. Siempre

1.2.11 Usted motiva al personal bajo su dependencia a integrarse a los nuevos planes y/o estrategias.

- 1. Nunca
- 2. Casi nunca
- 3. Algunas veces
- 4. Casi siempre
- 5. Siempre
1.2.12 De las siguientes alternativas cuales usted utiliza para determinar las necesidades de los estudiantes.

☐ la intuición
☐ entrevistas informales a los estudiantes
☐ entrevistas al personal docente
☐ entrevistas al personal administrativo de diferentes departamentos
☐ encuestas administradas por cuestionarios a los estudiantes
☐ por medio de grupos focales constituidos por estudiantes, tutores, personal docente y administrativo

GRACIAS!  

______/_______ 2000
Appendix B

Evaluation to students

English and Spanish versions
EVALUATION TO STUDENTS
PONTIFICIA UNIVERSIDAD CATOLICA MADRE Y MAESTRA
SANTIAGO, DOMINICAN REPUBLIC

The purpose of this study is to determine the quality of services that you are receiving at PUCMM. We would also like to determine if your needs as student are being met.

We thank you in advance for your participation in this evaluation.

(Please circle a number according to the following equivalency:

1. Never (N)
2. almost never (AN)
3. sometimes (S)
4. almost always (AW)
5. always (A)

I. Students feel that their needs at PUCMM are satisfied.

1. LIBRARY:

2.1.1 The collection of books in the areas needed is updated.

\[ N \quad AN \quad S \quad AW \quad A \]
1 2 3 4 5

2.1.2 Books are available for borrowing when needed.

\[ N \quad AN \quad S \quad AW \quad A \]
1 2 3 4 5

2.1.3 Audiovisual aids are available for borrowing when needed.

\[ N \quad AN \quad S \quad AW \quad A \]
1 2 3 4 5

2.1.4 The clerk is polite. (friendly)

\[ N \quad AN \quad S \quad AW \quad A \]
1 2 3 4 5

2.1.5 You have to wait a long time for the clerk to take care of you. (The waiting period is reasonable)

\[ N \quad AN \quad S \quad AW \quad A \]
1 2 3 4 5

2.1.6 The clerk is efficient (He/she shows knowledge in his/her area)

\[ N \quad AN \quad S \quad AW \quad A \]
1 2 3 4 5

2.1.7 The clerk is apt to answer questions within his area of service, according to your needs.

\[ N \quad AN \quad S \quad AW \quad A \]
1 2 3 4 5
2.1.8 The clerk knows where to send you if you need service from another department.

NANSAW A
1 2 3 4 5

2.1.9 Every semester you evaluate, through surveys, the quality of services you get.

NANSAW A
1 2 3 4 5

2.1.10 Every semester you are evaluated to find out if your needs as student are being met.

NANSAW A
1 2 3 4 5

2. REGISTRARS OFFICE

2.1.2.1 The clerks are polite. (friendly)

NANSAW A
1 2 3 4 5

2.1.2.2 I am helped promptly. (within reasonable time)

NANSAW A
1 2 3 4 5

2.1.2.3 The clerk is efficient. (He/she shows knowledge in his/her area).

NANSAW A
1 2 3 4 5

2.1.2.4 The clerk is apt to answer questions within his/her area of competence according to your needs.

NANSAW A
1 2 3 4 5

2.1.2.5 The clerk knows where to send you if you need service from another department.

NANSAW A
1 2 3 4 5

2.1.2.6 Every semester you evaluate, through surveys, the quality of services you get.

NANSAW A
1 2 3 4 5

2.1.2.7 You receive evaluations from this office to determine if your needs are being met.

NANSAW A
1 2 3 4 5

3. ADMISSIONS OFFICE

2.1.3.1 The clerks are polite. (friendly)

NANSAW A
1 2 3 4 5
2.1.3.2 I am helped promptly. (Within a reasonable time)

N AN S AW A
1 2 3 4 5

2.1.3.3 The clerk is efficient. (His/her performance shows knowledge within her area)

N AN S AW A
1 2 3 4 5

2.1.3.4 The clerk is apt to answer questions within his/her area of competence according to your needs

N AN S AW A
1 2 3 4 5

2.1.3.5 The clerk knows where to send you if you need service from another department.

N AN S AW A
1 2 3 4 5

2.1.3.6 The quality of services was evaluated after contacting this office.

☐ Yes
☐ No
☐ Not sure

2.1.3.7 You are surveyed periodically by the Admissions Office with the purpose of finding out if your needs are being met.

☐ Yes
☐ No
☐ Not sure

2. Students feel that their needs are measured and reflect on administrative actions.

2.2.1 You are surveyed every semester as to the quality of services offered throughout the university.

N AN S AW A
1 2 3 4 5

2.2.2 Every semester you evaluate the professors as to their academic performance in all your classes.

N AN S AW A
1 2 3 4 5

2.2.3 You have participated in focal groups to evaluate the programs in your field of studies.

N AN S AW A
1 2 3 4 5

2.2.4 You have been surveyed by PUCMM administrators to find out what your needs are as a student.

N AN S AW A
1 2 3 4 5

2.2.5 Your parents or tutors have participated in focal groups at PUCMM to discuss and analyze your needs as a student.

☐ Yes
☐ No
☐ Not sure
2.2.6 You have participated with administrators from PUCMM in the analysis and discussions as to what students' needs are.

☐ Yes
☐ No
☐ Not sure

2.2.7 How would you rate customer service as a whole?

☐ 1. very deficient
☐ 2. deficient
☐ 3. normal
☐ 4. good
☐ 5. very good
☐ 6. excellent

2.2.8 How would you rate faculty's performance?

☐ 1. very deficient
☐ 2. deficient
☐ 3. normal
☐ 4. good
☐ 5. very good
☐ 6. excellent

2.2.9 How would you rate academic quality?

☐ 1. very deficient
☐ 2. deficient
☐ 3. normal
☐ 4. good
☐ 5. very good
☐ 6. excellent

10. Years you have studied at PUCMM

11. Program of studies

12. Sex:

☐ Female
☐ Male

Thank you! Date__/__/2000
EVALUACION A LOS ESTUDIANTES DE LA PONTIFICIA UNIVERSIDAD CATOLICA MADRE Y MAESTRA SANTIAGO, R. D.

El objetivo de esta encuesta es determinar la calidad de servicios que usted como estudiante o cliente de la PUCMM recibe. Además, determinar si sus necesidades en las diferentes áreas son o han sido satisfechas. De antemano agradeceremos su participación al tomar unos minutos de su tiempo para contestar el cuestionario.

Por favor encierre en un círculo el número dado con la equivalencia siguiente:

1. Nunca (N)
2. Casi nunca (CN)
3. Algunas veces (AV)
4. Casi siempre (CS)
5. Siempre (S)

1. Los estudiantes de la PUCMM sienten que sus necesidades son satisfechas.

1. BIBLIOTECA:

2.1.1.1 La colección bibliotecaria está actualizada en las áreas de sus necesidades.

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2.1.1.2 Los libros están disponibles para préstamo cuando usted los necesita.

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2.1.1.3 Los recursos audiovisuales están disponibles para préstamos cuando los necesita.

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2.1.1.4 El personal que le atiende es amable.

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2.1.1.5 Usted es atendido/a prontamente (el tiempo de espera es razonable dentro de un límite aceptable)

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2.1.1.6 El personal que le atiende es eficiente (Refleja conocimiento en su área)

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2.1.1.7 El personal que le atiende le orienta adecuadamente según sus necesidades en su área de competencia.

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2.1.1.8 El personal sabe dónde dirigirle en caso que usted necesite servicio de otro departamento.

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2.1.1.9 Usted evalúa los servicios que ofrece esta unidad a través de encuestas todos los semestres.

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2.1.1.10 Usted es evaluado todos los semestres por la dirección de la Biblioteca para determinar si sus necesidades están siendo o han sido satisfechas.

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2. OFICINA DEL REGISTRO:

2.1.2.1 El personal que le atiende es amable.

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2.1.2.2 Usted es atendido/a prontamente (el tiempo de espera es razonable dentro de límites aceptable)

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2.1.2.3 El personal es eficiente (Refleja entrenamiento en su área)

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2.1.2.4 El personal que le atiende le orienta adecuadamente según sus necesidades en sus áreas de competencia.

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2.1.2.5 El personal sabe dónde dirigirle en caso de que tenga usted la necesidad de ser atendido/a en otro departamento.

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2.1.2.6 Todos los semestres usted evalúa, a través de encuestas, a la calidad de servicios que recibe.

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2.1.2.7 Usted es evaluado todos los semestres por la dirección del Registro para determinar si sus necesidades están siendo o han sido satisfechas.

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3. **OFICINA DE ADMISIONES:**

2.1.3.1 El personal le atiende amablemente

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2.1.3.2 Usted es atendido/a prontamente (el tiempo de espera es razonable dentro de límites aceptable)

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2.1.3.3 El personal que le atiende es eficiente (Refleja entrenamiento en su área)

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2.1.3.4 El personal que le atiende le orienta adecuadamente según sus necesidades en su área de competencia.

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2.1.3.5 El personal sabe dónde dirigirle en caso de que tenga usted la necesidad de ser atendido/a en otro departamento.

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2.1.3.6 Usted evaluó la calidad del servicio que recibió en esta Oficina con el fin de medir la calidad del mismo.

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2.1.3.7 Usted es evaluado periódicamente por la Dirección de Admisiones para determinar si sus necesidades están siendo satisfechas durante sus estudios en la PUCMM.

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2. **Los estudiantes sienten que sus necesidades son medidas y reflejadas en la acción administrativa.**

2.2.1 Usted recibe evaluaciones todos los semestres para determinar si está satisfecho con la calidad de los servicios ofrecidos a través de la universidad.

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2.2.2 Todos los semestres usted evalúa a los profesores en todas las clases para determinar su satisfacción con respecto a la actuación académica de los mismos.

| 1 | 2 | 3 | 4 | 5 |
2.2.3 Usted ha participado en grupos focales, invitado por la PUCMM con el fin de evaluar el curriculum de su carrera.

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2.2.4 Ha sido entrevistado por la administración de la PUCMM con el fin de conocer sus necesidades como estudiante.

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2.2.5 Sus padres o tutores han participado en grupos focales en la PUCMM con el fin de discutir y analizar sus necesidades como estudiante.

☐ Sí
☐ No
☐ No estoy seguro/a

2.2.6 Ha participado con administradores de la PUCMM en el análisis y discusión de cuáles son las necesidades de los estudiantes de esta universidad.

☐ Sí
☐ No
☐ No estoy seguro/a

2.2.7 ¿Cómo evalúa usted el servicio al cliente en general?

☐ 1. muy deficiente
☐ 2. deficiente
☐ 3. normal
☐ 4. bueno
☐ 5. muy bueno
☐ 6. excelente

2.2.8 ¿Cómo evalúa usted el desempeño de los profesores?

☐ 1. muy deficiente
☐ 2. deficiente
☐ 3. normal
☐ 4. bueno
☐ 5. muy bueno
☐ 6. excelente

2.2.9 ¿Cómo evalúa usted la calidad académica?

☐ 1. muy deficiente
☐ 2. deficiente
☐ 3. normal
☐ 4. buena
☐ 5. muy buena
☐ 6. excelente.


12. Sexo:
☐ Masculino
☐ Femenino

_____ / _____ 2000  GRACIAS!
Appendix C

Pre-test to students to determine their needs

Spanish version
Hola! Estamos realizando una entrevista a los estudiantes de la PUCMM con el fin de recolectar datos acerca de sus requerimientos para estudiar en este centro educativo. Agradeceremos nos brinde unos segundos de su tiempo.

Carrera __________________________ Semestre __________________________ Fecha __________________________

1. Se enteró de la PUCMM por medio de: (Puede circular más de una opción)
   a) Estudiantes
   b) Profesores
   c) Egresados de la Universidad.
   d) Personas no vinculadas a la universidad
   e) Publicidad (anuncio, video, aviso, carta)
   f) Familiar (es)
   g) Otros (especifique) ____________________________________________

2. ¿Cuáles eran sus expectativas cuando ingresó a la PUCMM?

3. ¿Cuáles eran sus necesidades académicas?

4. ¿Cuáles y en qué áreas específicas han sido los resultados obtenidos de acuerdo a sus expectativas y necesidades?

5. ¿Recomendaría la PUCMM a otros?  a) Sí  b) No  ¿En qué aspectos?

6. Sexo  a) Masculino  b) Femenino

7. Nivel de ingreso familiar:
   a) Menos de RD$10,000.00 mensual
   b) De RD$10,001 a RD$16,000.00 mensual
   c) De RD$16,001.00 a RD$20,000.00 mensual
   d) De RD$20,001.00 a RD$26,000.00 mensual
   e) De RD$26,001.00 a RD$50,000.00 mensual
   f) Más de RD$50,000.00.

Gracias!