Service Quality in Higher Education
Case study: Measuring service quality of Islamic Azad University, Firoozkooh branch

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ABSTRACT

The aim of this article measuring service quality in education is increasingly important for attracting and retaining tuition-based revenues. The objectives of this paper are two folds: first, to identify the service quality factors. Second, describe research undertaken to assess the quality of service provided by a university in Iran. In this research we used two Questionnaires with 22 questions with seven-point Likert scale was used to measure the perceptions and expectations of perceived quality were distributed. Factor analysis used for validity of the constructs for the subsequent analyses. Scale items were retained for testing reliability and construct validity. These findings were then tested using a survey study. The results show that gap between student’s perceptions and student’s expectations exist.

Keywords: service quality, Higher education, Students, University, Iran.

INTRODUCTION

In a world where branding becomes the basis for competition of unique products and services in attracting a larger market share for ultimate profitability, consumers are largely spoil for choice. How does one decide which product or service is better than others? While a multitude of factors may contribute to the decision process, the one (underlying) factor that differentiates itself and taps into the direct experience of the consumer is “service quality” (Cronin and Taylor, 1992). More so for the education sector where no real products are conceivably involved; services provided will, therefore, be perceived as the competitive demarcation between institutions in terms of their superiority in creating unique experiences. Teaching is a service while learning is an experience.

The improvement of higher education service quality lies in the organization’s ability to provide an overall climate and culture for change through its various decision-making systems, operating systems, and human resource practices (Mosadeghard, 2006). In alignment with this argument, a transformation from hierarchical top-down structures to top management commitment, decentralization, employee involvement and effective leadership is a prerequisite for TEI’s adaptation towards the implementation of quality assurance systems (Mizikaci, 2003). Given that Organizational these transformations often meet employee resistance to change, the successful culture introduction of a quality assurance system depends on decisive factors such as trust and long-term commitment to the organization (Zammuto and O’Connor, 1992); participation in decision making (Baroudi et al., 1986; Franz and Robey, 1986); and empowerment. In this paper first identify the service quality factors with higher education approach and. Second, describe research undertaken to assess the quality of service provided by a university in Iran.

THEORETICAL BACKGROUND

Defining quality in higher education has proved to be a challenging task. Cheng and Tam (1997, p. 23) suggest that “education quality is a rather vague and controversial concept” and Pounder (1999, p. 156) argues that quality is a “notoriously ambiguous term”. As a result of the difficulty in defining quality, the measurement of quality has also proved to be contentious. There have been various attempts to draw on industry models such as the quality dimensions of Gronroos, Garvin and Parasuraman (Owlia and Aspinwall, 1996), SERVQUAL (Oldfield and Baron, 1998; Aldridge and Rowley, 1998), importance-performance analysis (Ford et al., 1999) and the balanced scorecard (Cullen et al., 2003) to develop quality assessment models for higher education. Internationally, the tool most frequently drawn upon (Cruickshank, 2003; Motwani and Kumar, 1997; Eriksen, 1995) however, is that of total quality management (TQM), defined as: a management approach of an

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organization, centered on quality, based on the participation of all its members and aiming at long run success through customer satisfaction and benefits to all members of the organization and to society (ISO 8402 in Wiklund et al., 2003, p. 99). The rationale for adoption is that TQM has the potential to encompass the quality perspectives of both external and internal stakeholders in an integrated manner and thereby enable a comprehensive approach to quality management that will assure quality as well as facilitate change and innovation.

Despite their support for viewing education as a system, Sahney et al. (2004) suggest that this creates further difficulty in conceptualizing quality as the different component parts of the system have different requirements. The authors’ review of the literature suggests that there have been a number of different attempts to articulate the dimensions of quality in higher education as Garvin (1987) did for services. One of the most clearly defined set of dimensions of quality for higher education has been identified by Harvey and Knight (1996). They argue that quality can be broken down into five different but related dimensions:
(1) Quality as exceptional (e.g. high standards);
(2) Quality as consistency (e.g. zero defects);
(3) Quality as fitness for purpose (fitting customer specifications);
(4) Quality as value for money, (as efficiency and effectiveness); and
(5) Quality as transformative (an ongoing process that includes empowerment and enhancement of customer satisfaction).

As shown in Table1 some of quality dimensions with sample items by Owlia and Aspinwall’s (1996) theoretical framework of quality dimensions with an emphasis on teaching aspects of education (academic resources, competence, attitude, content) and Waugh (2001) model of administrative and supportive services quality (reliability and responsiveness, assurance and empathy).

<table>
<thead>
<tr>
<th>Quality dimension</th>
<th>Sample items</th>
<th>Number of items</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic resources</td>
<td>Sufficiency of academic equipment, e.g. laboratories, workshops</td>
<td>5</td>
<td>Owlia and Aspinwall (1996)</td>
</tr>
<tr>
<td></td>
<td>Rate of access to information sources, e.g. books, journals, software, networks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence</td>
<td>Theoretical (relevant) knowledge of academic staff</td>
<td>4</td>
<td>Owlia and Aspinwall (1996)</td>
</tr>
<tr>
<td></td>
<td>Practical (relevant) knowledge of academic staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expertise of academic staff in teaching/communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td>Extent to which academic staff understand students’ academic needs to help</td>
<td>3</td>
<td>Owlia and Aspinwall (1996)</td>
</tr>
<tr>
<td></td>
<td>Degree of academic staff’s willingness to help</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Availability of academic staff for guidance and advice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content</td>
<td>Extent to which students learn communication skills</td>
<td>7</td>
<td>Owlia and Aspinwall (1996)</td>
</tr>
<tr>
<td></td>
<td>Extent to which students learn team working skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relevance of curriculum to the future jobs of students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliability and responsiveness</td>
<td>Administrative contact</td>
<td>9</td>
<td>Waugh (2001)</td>
</tr>
<tr>
<td></td>
<td>Confident and dependable administrative advice</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Early notification of administrative changes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assurance and empathy</td>
<td>Courteous and confidence in contact</td>
<td>8</td>
<td>Waugh (2001)</td>
</tr>
<tr>
<td></td>
<td>Personal contact and understanding</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contact with caring</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table1: quality dimensions

External control and manipulation affects the degree to which faculty and administrators view the importance of quality assurance as a path towards institutional effectiveness. It is argued that front-line staffs do not mutely accept policy or the changes associated with it, and are not passive recipients of management actions. This argument impinges upon the view that “academic culture” exists.
as a monolithic, mono-cultural entity guiding the behavior, thoughts and actions of academics. Thus, culture may be considered as at least partly constructed on an ongoing basis by individuals and groups (Trowler, 1998). Harvey and Knight (1996) concluded that quality assurance systems have negative impact on staff in higher education. In particular, organizational members who are already involved in innovation and quality initiatives may be discouraged by accountability approaches. Furthermore, they have to overcome both the additional burden of responding to external scrutiny and the feeling of being manipulated and undervalued by managers and external agencies.

Roffe (1998) suggests that while there are a small number of quality indicators in industry, these are more numerous and complex in higher education and are therefore more management difficult to assess. Srikanthan and Dalrymple (2002) highlight that the application of TQM is more appropriate to the service rather than the education functions of a university. Similarly Yorke (1994) advises that accountability relationships are more complicated and Roffe (1998) highlights that while the accountability emphasis of TQM in industry is on a team, this tends to lie with individuals in higher education.

Harvey (1995) further argues that the emphasis on quality in industry lies predominantly with the customer, whereas in higher education there is a continued debate regarding who the customer actually is. Critics of this approach suggest that a whole adoption of TQM without adaptation to reflect the particular characteristics of higher education is unacceptable (Yorke, 1994). It has even been purported that the practice of TQM in higher education is deteriorating into managerialism because of the disparity between TQM techniques and educational processes, as well as the lack of shared vision within institutions or educational fields (Srikanthan and Dalrymple, 2003). As a result of this debate, Hewitt and Clayton (1999, p. 838) recommend that a model of educational quality that is different from, but capable of being related to commercial models, is beginning to emerge. However, it is not yet complete. Srikanthan and Dalrymple (2003) suggest that “a fresh view is necessary of quality in higher education”. A starting point for this process is arguably a comprehensive assessment of current practices to determine the extent to which different meanings of quality and different stakeholder perspectives are taken into account. Drawing on relevant literature from both education and industry, a new framework for a quality audit tool has therefore been developed in order to assess current quality management approaches within higher education.

Smart (2003), states that the organization must recognize either a threat to its survival, or a strong positive external pressure calling for adaptation and integration of new systems, before the introduction of changes. Employees must be convinced that the change is necessary not only for organizational survival but also for betterment at the individual as well as at the organizational level. Since, leadership come to play a significant role in the transformation of attitudes, management has to find ways to facilitate changes towards enhanced service quality. In this line, management systems that support the emotional needs of people, and encourage experimentation are required. Designing organizational systems that take into account human relations and employee welfare, and create a climate that promotes positive group interactions and creativity is of utmost importance for an institute that values openness, trust, and innovativeness in the academic community. In addition, Lakos and Phipps (2004) support that by involving staff in decision making and developing clear and comprehensive communication systems, increase the potential for actual cultural change.

Service Quality Literature
SERVQUAL has earned great popularity and wide application in last decades. The majority of the studies in higher education service quality have focused on student’s view of quality, while little attention has been paid on the perspective of academic and administration staff. In a similar vein, few researchers have empirically tested measurement instruments of service quality referring to teaching processes as well as administration services.

Research on service quality gained momentum in the early 1980s. Initially the focus was on defining service quality. Lewis and Booms suggested that "service quality is a measure of how well the service level delivered matches customers expectations". Research by Gronroos (1982) focused on what he referred to as the "missing service quality concept." He argued there was a difference between technical quality, which describes what the customer gets, and is objective in nature, and functional quality which describes how the customer gets it, and is subjective in nature. Lethinen and Lethinen( 1982) viewed quality from the customer's perspective and suggested that customers perceive process quality (the customer's qualitative evaluation of their participation in the service production process) and output quality (the customer's evaluation of the result of a service production process).
Research by Parasuraman, Zeithaml and Berry into the service quality concept has focused on three issues: what is service quality; what causes service quality problems; and what can service organizations do to improve quality. Parasuraman et al (1985) developed a service quality model to demonstrate that consumers’ perceptions of quality are influenced by four separate gaps occurring in organizations.

The SERVQUAL approach to measuring service quality departs from the customer’s perception. It is argued that perceived service quality involves a comparison of expectations with actual performance. In the SERVQUAL model, perceived service quality is determined by the size and direction of so-called internal gaps: between customer expectations and management perceptions of those expectations; between management perceptions of customer expectations and the firm’s service quality specifications; between service quality specifications and actual service delivery; and between actual service delivery and external communications about the service. The SERVQUAL instrument is based on Gap 5. Parasuraman et al. (1985) concluded that consumers evaluated service quality by comparing expectations with perceptions on ten dimensions: tangibles, reliability, responsiveness, communication, credibility, security, competence, courtesy, understanding/knowing customers, and access. These ten dimensions were subsequently collapsed into five generic service-quality dimensions, as follows: (1) tangibles (measured by four items): the appearance of physical facilities, equipment, and personnel; (2) reliability (five items): the ability to perform the promised service dependably and accurately; (3) responsiveness (four items): the willingness to help customers and provide prompt service; (4) assurance (four items): the knowledge and courtesy of employees and their ability to inspire trust and confidence; and (5) empathy (five items): the level of caring and individualized attention the firm provides to its customers (Table 2).

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Definition</th>
<th>Items in scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>The ability to perform the promised service dependably and accurately</td>
<td>4</td>
</tr>
<tr>
<td>Assurance</td>
<td>The knowledge and courtesy of employees and their ability to convey trust and confidence</td>
<td>5</td>
</tr>
<tr>
<td>Tangibles</td>
<td>The appearance of physical facilities, equipment, personnel and communication materials</td>
<td>4</td>
</tr>
<tr>
<td>Empathy</td>
<td>The provision of caring, individualized attention to customers</td>
<td>5</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>The willingness to help customers and to provide prompt service</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 2: Service-quality dimensions

Each dimension can be quantified by obtaining measures of expectations and perceptions of performance for service attributes relevant to each dimension, calculating the difference and then averaging across attributes (Bolton and Drew, 1991).

These five dimensions are thus assessed by a total of 22 items. Each item is measured on the basis of responses to two statements that measure: (1) the general expectations of customers concerning a service; and (2) the perceptions of customers regarding the levels of service actually provided by the company within that service category.

For each statement, the SERVQUAL respondent indicates his or her opinion on a seven-point Likert-type scale ranging from research “strongly disagree” (1) to “strongly agree” (7). The data are converted into “perception-minus-expectation” scores for each statement.

The gap score (G) is calculated on an item-by-item basis as the difference between the raw perception-of-performance score (P) and the raw expectation score (E) for matching items; therefore, G = P – E. Following this calculation, the greater the perception-minus-expectation score, the greater is the perceived service quality.

Service quality in higher education

Quality in higher education is a complex and multifaceted concept and a single correct definition of quality is lacking (Harvey and Green, 1993). As a consequence, consensus concerning “the best way to define and measure service quality” (Clewes, 2003) does not exist yet. Every stakeholder in higher education (e.g. students, government, professional bodies) has its own view of quality due to particular needs. Students receive and use the training offered by the university, which makes them priority customers of educational activities (Marzo-Navarro et al., 2005). Authors such as Sander et al. (2000), Gremler and McColough (2002), and Hill (1995)
also regard students as primary consumers of higher education service. This view, however, does not mean that other perspectives may not be valid and important as well. In this connection, Guolla (1999) rightly points out that students could also take the role as clients, producers, and products. Based on findings in the service quality literature, O’Neill and Palmer (2004, p. 42) define service quality in higher education as “the difference between what a student expects to receive and his/her perceptions of actual delivery”.

The overriding value in measuring service quality in higher education lies in the identification of critical aspects of the service delivery (Abdullah, 2006). However, this assumes a customer-led strategy, whereby the student, as the buyer of the service exchange, is regarded as the customer (Owlia and Aspinwall, 1996). It has been argued that a “customer” metaphor for describing the university service exchange from the perspective of students is unsuitable (Svensson and Wood, 2007). After all, this indirectly frames the academic as the service provider, and thus retracts their immunity from the common marketing axiom: “the customer is always right” (Scott, 1999). It follows that if students cannot be seen as “customers”, the measurement of service quality, with the intention of improving the service offering is wholly inappropriate. Some contend this view, suggesting that the acceptance of the student as the “customer” need not negate the power relationship between students and academic staff (Scott, 1999; Sines and Duckworth, 1994). It appears that refuting the idea of the student as a university customer on such grounds is narrow, and ignores the fact that the university experience is wider than just the contact between students and academics. It has been found that when making the uncertain and high-risk decision of choosing a university, “the student will look for evidence of service quality”,

Confirming its importance in the university’s function (Donaldson and McNicholas, 2004), Therefore, ignorance of the competitive nature of attracting students, alongside the importance of measuring the service quality, will ultimately be at the disadvantage of the institution. The importance of this has been claimed by Sines and Duckworth (1994) who summarized this position by saying that: “it’s time for educational institutions to face two facts: they are in a competitive battle for students, and students are customers”.

Student expectations are a valuable source of information (Sander et al., 2000; Hill, 1995). Especially new undergraduate students may have idealistic expectations, and if higher education institutions know about their (new) students’ expectations, they may be able to respond to them to a more realistic level. At least, universities could inform students of what is realistic to expect from lecturers (Hill, 1995). The knowledge of student expectations may also help lecturers to design their teaching programmes (Sander et al., 2000). Hill (1995) found that student expectations in general, and in particular, in relation to academic aspects of higher education services such as teaching quality, teaching methods, and course content have been quite stable over time. Telford and Masson (2005) point out that the perceived quality of the educational service depends on students’ expectations and values. The authors cite several studies that indicate a positive impact of expectations and values on variables such as student participation (Claycomb et al., 2001), role clarity, and motivation to participate in the service encounter (Lengnick-Hall et al., 2000; Rodie and Kleine, 2000). Accordingly, Telford and Masson (2005) believe that it is important to understand expectations and values of students in higher education.

In higher education literature, Browne et al. (1998) and Guolla (1999) show that students’ perceived service quality is an antecedent to student satisfaction. Thus, this paper follows the majority of recent papers that regard service quality as an antecedent to customer satisfaction. Positive perceptions of service quality can lead to student satisfaction and satisfied students may then attract new students by engaging in positive word-of-mouth communication to inform acquaintances and friends, and they may return to the university to take other courses (Marzo-Navarro et al., 2005; Wiers-Jenssen et al., 2002; Mavondo et al., 2004; Schertzer and Schertzer, 2004). Student satisfaction has also a positive impact on fundraising and student motivation (Elliott and Shin, 2002). Winsted (2000) and Zeithaml et al. (1990) maintain that service providers will only be able to deliver service encounters that will satisfy customers if they know what their customers expect in general, and if they understand the critical employee behaviors and attitudes from a customer’s point of view in particular. If lecturers know what their students expect, they may be able to adapt their behavior to their students’ underlying expectations, which should have a positive impact on their perceived service quality and their levels of satisfaction.

Oldfield and Baron (2000) maintain that “there is an inclination to view service quality in higher education from an organizational perspective”. They suggest that institutions should better pay attention to what their students want instead of collecting “data based upon what the institution perceives its students find important”.

Similarly, Joseph et al. (2005) point out that research on service quality in higher education has relied too strongly on the input from academic insiders while excluding the input from the students themselves. They
believe that traditional approaches leave “decisions about what constitutes quality of service (e.g. such as deciding what is ‘most important’ to students) exclusively in the hands of administrators and/or academics”. The authors, therefore, suggest that academic administrators should focus on understanding the needs of their students, who are the specific and primary target audience.

**METHODOLOGY**

Two Questionnaires with 22 questions with seven-point Likert scale was used to measure the perception and expectation of perceived quality were distributed. We received a total of 384 completed surveys from students of University of Islamic Azad Firoozkooh branch. The collected data of sample was 56.1 percent females and 42.3 percent males. Perception minus expectation scores per attribute and dimension were computed to identify the service quality gaps. Factor analysis used for validity of the constructs for the subsequent analyses. Values of KMO for each Factor listed in table 3, Scale items were retained for testing reliability and construct validity. To review the internal consistency of the modified scale items, Total Cronbach alpha coefficients were computed and found to be 0.743 and for each item listed in table 4.

**CONCLUSION**

They proposed that perceived service quality reflects the difference between consumer expectations and perceptions which depends on the size and direction of the four gaps related to the delivery of service quality on the providers' side.

SERVQUAL can trace the trend of customer relative importance, expectation, and perception, if applied periodically and it is able to identify specific area of excellence and weaknesses. Also it is able to prioritize area of service weaknesses.

The results of this research show that there is a gap between student’s perceptions and student’s expectations and among factors and dimensions of the SERVQUAL model, reliability, tangibility, responsiveness, assurance and empathy are important for students (figure1).

**REFERENCES**


<table>
<thead>
<tr>
<th>KMO</th>
<th>% of Variance</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.762</td>
<td>59.14</td>
<td>tangibility</td>
</tr>
<tr>
<td>0.811</td>
<td>54.86</td>
<td>reliability</td>
</tr>
<tr>
<td>0.649</td>
<td>43.48</td>
<td>responsiveness</td>
</tr>
<tr>
<td>0.757</td>
<td>65.57</td>
<td>assurance</td>
</tr>
<tr>
<td>0.758</td>
<td>46.61</td>
<td>empathy</td>
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</table>

Table 3: KMO

<table>
<thead>
<tr>
<th>Alpha Cronbach</th>
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<tbody>
<tr>
<td>Performance</td>
</tr>
<tr>
<td>0.764</td>
</tr>
<tr>
<td>0.791</td>
</tr>
<tr>
<td>0.506</td>
</tr>
<tr>
<td>0.824</td>
</tr>
<tr>
<td>0.70</td>
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Table 4: Alpha Cronbach