



EdPERF: The development of an instrument to measure perceived service quality in secondary schools

by

Corlea Saayman

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Prof. Clifton Chadwick

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Department of Education
British University in Dubai
Dubai
UAE

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ABSTRACT

Private education has become a profitable business. But, profitability can only be achieved if the perceived service quality is acceptable to customers who, in the case of schools, are students and parents. Service quality in schools emphasizes the need for management to identify and improve service delivery continuously.

This study developed a protocol (EdPERF) for determining quality service provision in schools. It drew on best practice from accreditation instruments of leading international school accrediting agencies. EdPERF measures the quality of service delivery in schools by analyzing customer perception in four key areas: *School Leadership, Academic Success, Non Academic Aspects* and *Support Services*

The purpose of EdPERF is to help school managers identify areas in which customers are not satisfied with the service they currently receive. Establishing methods to improve this quality enables school managers to achieve a competitive advantage and build customer satisfaction.

Results obtained from private schools and the conclusions drawn were shared with the Principals. Their subjective opinions on the level of validity were used to assess the effectiveness and reliability of the instrument. The Principals concurred that the protocol had indeed identified areas which they too had observed.

The author is proposing an industry specific instrument that identifies areas of satisfaction/dissatisfaction as perceived by parents and students, and validated by school managers.

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SUMMARY

Private education has become a profitable business. But, profitability can only be achieved if the perceived service quality is satisfactory to the direct customers, in the case of schools, this represents parents and students. Service quality emphasizes the need for school management to identify, recognize and improve processes on a continuous basis. Results obtained from the EdPERF instrument are intended to help school managers identify areas in which customers are not satisfied with the service they currently receive from the private school of their choice. By establishing methods to improve the quality of the delivered service, school managers ultimately achieve a competitive advantage and build customer satisfaction. EdPERF measures the quality of service delivery in schools by analyzing customer perception in four key areas: *School Leadership, Academic Success, Non Academic Aspects* and *Support Services*. The author is proposing an industry specific instrument that identifies areas of satisfaction and dissatisfaction as perceived by parents and students, and validated by school managers. EdPERF has been applied successfully in the private school sector in the UAE and aims to build a value chain through the creation of a total education delivery process.

CHAPTER 1

INTRODUCTION AND REVIEW OF LITERATURE

“The object of education lies not in communicating the values of the past, but in creating new values for the future.”

John Dewey

1.1 INTRODUCTION

Competition within the private school sector has compelled those owning and managing schools to take a serious look at the quality of their service. The costs of establishing and developing a new school have become very expensive. School fees are high, and parents are quite prepared to pay high fees for the education of their children. Entrepreneurs have realised that private education can be a profitable business, but profitability is only achievable if the customers know that they are receiving value for money.

Over the past thirty years this focus on quality service provision has been attracting increasing attention within the service industry as a result of the increased competition. Typically, the focus on quality of such service provision was associated with the hospitality industry. Previously and traditionally however, quality control, as opposed to service quality, was always an *a priori* requirement in the production industries where the quality and reliability of a product in the mass production market was what differentiated the market leader from the followers.

Over the past ten years, service quality has increasingly become an important component in the field of private education.

Parasuraman, et al. (1988) defines perceived service quality as a global judgement, or attitude, relating to the superiority of the service. Cronin

and Taylor (1994) define it as the measurement of a specific long-term attitude at a single point in time. Hawes & Stephens (1990) describe “quality” as a matter of *three* interrelated factors: *efficiency* (better use of available resources); *relevance* (to needs and contexts); and *something more* (to journey a little further than mere efficiency and relevance). Their research found that quality and action towards its improvement can be complex processes in themselves, dynamic and constantly shifting in tune to new needs and changing conditions. Service quality *perceptions* reflect a customer’s evaluative perceptions of a service encounter at a specific point in time. In contrast, customer *satisfaction* judgements are experiential in nature, involving both an end state and a process and reflecting both emotional and cognitive elements (Oliver, 1993).

Cheng (1995, p.128) defines “quality” within the education context as,

“...the character of the set of elements in the input, process, and output of the education system that provides services that completely satisfy both internal and external strategic partners meeting their explicit and implicit expectations.”

Quality addresses the issue of service non-conformance. The aim is to prevent poor quality services from being delivered in the first place by focusing on processes and emphasizing prevention rather than cure.

Educational quality has been exhaustively examined in recent years, proposing ways to promote better learning in schools through emphasizing teachers, schools and communities as the catalysts of quality.

From the definitions discussed above, it is clear that the concept of quality in schools has been a much debated topic with various emerging

descriptions and interpretations. Quality is not a stationary concept and it appears to be determined by the perceptions of the customer.

McNealy (1993, p.24) supports this proposition by stating that quality is,

“...a dynamic state of meeting or exceeding customer needs and expectations: these needs and expectations are determined through communication with customers.”

Adams (1993, pp. 12-13) identifies *multiple* co-existing definitions of quality and describes it as follows:

- it has multiple meanings;
- it reflects individual values and interpretations;
- is multidimensional;
- changes over time and by context;
- can be assessed by quantitative or qualitative measures;
- is grounded in values, cultures, and traditions; and
- different stakeholder groups often have different definitions of quality.

Harvey (1995) outlines educational quality by providing *five* goals that defines its vision:

- *Exceptionality*: excellence and the pursuit of it to maximize the potential in individual students.
- *Consistency*: sound experiences across the system
- *Fitness-for-purpose*: refinement and perfecting in every subject area
- *Value for money*: quality is measured by the extent to which the system delivers value for money
- *Transformative potential*: quality education is the catalyst for positive changes in individuals and society as a whole

Internationally, it is an expectation that schooling will help children develop creatively and emotionally and acquire skills, values and

attitudes necessary for them to lead productive lives and become responsible citizens (EFA, 2005). This reflects a belief that all children can develop basic cognitive skills, given the right learning environment. The 'Ideal Educational Quality' (IEQ) approach as discussed by Ginsburg et al. (2001), distinguishes between the various focus areas of quality in order to explain their views on the meaning. They view the term "quality" as comprising of:

- **Inputs** (teacher preparation, school environment, children's learning abilities, parental involvement in the managing of the school);
- **Processes** (the conditions and relationships within the classroom,; rather than what teachers do in class, classroom and management techniques);
- **Content** (the nature of the curricula and how they are implemented in schools, the connection between curriculum objectives and the learners' own experiences within their communities);
- **Outputs** (how much learning actually takes place, how well all individuals succeed in terms of learning styles); and
- **Outcomes** (the degree to which children are learning and developing their abilities both for their own good and for the community and nation).

The word 'service' as used in the service industry, is associated with a diversity of qualifying adjectives each of which has a diversity of meanings too, such as intangible, inseparable, perishable and heterogenic (Lovelock, 1996). To judge the provision of service quality therefore, when the subject *per se*, is imprecise further compounds the difficulties in developing what can be measured with any degree of accuracy in the field of service provision. One can however, focus the provision of service quality for purposes of quality assessment as to whether or not it meets the needs and requirements of the customer, Lewis and Mitchell (1990), Dotchin and Oakland (1994), Asubonteng et al. (1996) and Wisniewski and Donnelly (1996).

In an education context, Idrus (1995, p.610) defines 'service quality' as,

"...customers' perceptions of how the concept and process of education meet their needs at all times and under all conditions, in such a way that the actions and interactions between the customer and the education institute will contribute to the good of society."

It is this definition of 'service' by Idrus that the author has applied to this study.

The phenomenon and pace of globalisation are touching the lives of everyone on the planet and their impact on education is only now becoming apparent. School design, the school day, curriculum, teaching methodology, assessment and examinations, pre-care and after-care and parental involvement are all becoming issues necessitating new thought and new ways of looking at old problems. Recent research has shown that an evolution of teaching, learning and research is vital if educators are to improve the efficiency and effectiveness of their institutions (Sheffield Hallam University, 2003).

It is against this background that the need for school management to identify, recognise and improve service quality is set.

Whatever the broader vision of quality, most countries' policies define *two* key elements as the basis of quality in education: students' cognitive development and social/creative/emotional development. There has however, been wide spread disagreement on what to measure as cognitive achievement and how to measure it. The second key element of social, creative, and emotional development is almost never measured in a manner which has significance, validity or reliability (UNESCO, 2004, p. 29).

It is only recently that policy makers and programme implementers have started looking seriously beyond input and output models and are now focussing on 'daily school experiences' as engines for quality (USAID/EQUIP2, 2006; Verspoor, 2006).

The existing literature suggests that schools and teachers' flexible policies; efficient administration; and community involvement should be emphasized in policies and programmes intended to help improve educational quality (Adams et al., 1993; Cummings, 1997; Dalin, 1994; LeCzel and Liman, 2003; Nielsen, 1997; Nielsen and Beykont, 1997; Nielsen and Cummings, 1997).

As Schubert (2002) rightly states, educational quality is not a final destination; instead it is a never-ending journey for policymakers who must understand what is driving and dampening school and classroom performance. Schubert also points out that educational quality begins and ends in the classroom with *assessment* of teaching and learning, *analysis* of both quantitative and qualitative procedures, and *action* based on the findings. A crucial feature of the 'Improving Educational Quality' process is that it rejects imported or force-fit solutions. Instead, it places emphasis on building the local capacity to design, conduct and apply research. The focus of this research remains the school and the classroom in which the teaching and learning takes place.

Parasuraman et al. (1985 and 1988) and Cronin and Taylor (1992) have provided empirical support for the notion that perceived service quality leads to customer satisfaction. Moreover, Monroe and Krishnan (1985, p.210) define perceived product quality as,

"...the ability of a product to provide satisfaction to the customer."

In a customer satisfaction model developed by Churchill and Surprenant (1982) global performance, defined as 'overall unit quality', is specified as a predictor of customer satisfaction. Although this is a much debated topic, the author believes that the relationship between service quality and customer satisfaction is a connection that is undeniable.

Increased customer satisfaction is a natural reaction to the improvement of service quality in schools.

Various instruments have been developed in an attempt to measure the perceptions of customers to the quality of the delivered service. *Two* of these instruments are the 'SERVice QUALity measurement' or 'SERVQUAL' instrument, developed by Parasuraman et al. in 1985, and the further expansion of this instrument by Cronin and Taylor in 1994, called 'SERVice PERFormance Measurement' or 'SERVPERF'. Both these instruments are designed to measure service quality as perceived by the customer at a specific point in time. They are also developed to be a standard measurement scale applicable to a wide variety of service industries.

SERVQUAL uses a gap conceptualization method by which perception (P) is subtracted from expectations (E) in an attempt to compare the perceived service with customer expectations (Parasuraman, et al., 1985). This instrument has since been under considerable critique especially from Teas (1993), Quester et al. (1995); Cronin and Taylor (1994) and Llusar and Zornoza (2000), who claim that the SERVPERF instrument, which only measures perceptions (P), delivers more reliable results, greater validity and less bias than the SERVQUAL scale. Perceptions (P) are defined as "customers' beliefs concerning the service received or the experienced service". Expectations (E) are defined as "desires or wants of customers", i.e., what they feel a service provider *should* offer rather than *would* offer. Parasuraman, et al. also noted that the service

expectations concept is intended to measure customers' normative expectations and that these expectations represent an 'ideal standard' of performance.

Literature however, appears to offer considerable support for the superiority of SERVPERF in comparison to other generic instruments. Standard instruments like these often require context-specific items for each industry, and although they have been extensively tested in the marketing sector, with some degree of success, this is not the case for other service segments.

Finding that a standard measuring device is not always applicable to all sectors, Firdaus (2004) has gone one step further by developing an instrument specifically for the Higher Education sector, called the Higher Education PERFormance measure or HEdPERF. Higher Education has become a competitive industry where competitive advantage and customer loyalty play an important role. Institutions in this sector actively compete for students and their sustainability depends on this. HEdPERF is a 41-item instrument that has been empirically tested by Firdaus (2004 and 2006) for unidimensionality, reliability and validity using both exploratory and confirmatory factor analysis.

The HEdPERF instrument comprises of *four* sections, numbered A, B, C and D respectively. Section A contains *nine* questions to profile the respondent, Section B and C require the evaluation of service components - the perception data - and consists of 22-items extracted from the original SERVPERF scale after modifications have been made in order to fit the Higher Education sector. All the statements in section B and C can be rated on a Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). Section D allows for an overall rating of service quality and concludes with three open-ended questions to allow for personal responses. The respondents of the HEdPERF instrument are

the institutes' students who are seen as the primary internal customers of the organization. Harvey et al. (1992) has noted that earlier attempts to define quality in Higher Education have been 'stakeholder relative'. Service customers have been found to be active participants of the service process (Zeithaml and Bitner, 1996; Rodie and Kleine, 2000; Bateson, 2002) and their perceptions of the delivered service depends on whether their expectations of the service are met (Parasuraman et al., 1985; Haywood-Farmer and Nollet, 1991). This is particularly true of education and it is in the light of this statement that the author proposes to develop the EdPERF (Education PERFORMANCE) instrument to measure perceived service quality in secondary schools, with specific reference to the private school sector, and focusing on schools in the United Arab Emirates.

1.2 RELEVANCE OF THE STUDY

The United Arab Emirates (UAE) consists of *seven* emirates of which Abu Dhabi is the largest, followed by Dubai, Sharjah, Ajman, Fujeirah, Ras Al Khaimah and Umm Al Quwain. The national education system is characterised by a free public school system that, until 2006, was accessible to the local Emirate population only. Foreigners are now allowed into public schools if they are able and willing to be educated in Arabic and pay a nominal school fee. Alternatively there are the more expensive private schools that cater to the needs of a huge expatriate population.

A variety of international schools offer an array of curricula, languages, extra-curricular programmes and school facilities. School fees range from five thousand Dirhams (£725) to fifty thousand Dirhams (£7,250) per school year [AED6.96 = £1]. Wealthier Emirate families choose to send their children to reputable private schools as this is believed to increase their chances of being accepted at an international university. Many

private schools teach male and female students in separate parts of the school campus and only community schools are allowed to have mixed classes if they comply with conditions set by the Ministry of Education.

The population of the UAE is growing so rapidly that it is providing serious competition for other countries for the 'accolade' of having one of the highest population growth rates in the world. The flow of foreign labour into the UAE has remained high as a result of high oil prices and heavy local and international investment. Based on census data collected in 2005, 38.1% of the country's estimated 4 million populations is less than fourteen years of age (Gulf News, 31 July 2006). The UAE has recently overtaken Egypt as the second largest Arab economy after Saudi Arabia, which reflects the country's explosive growth.

With the high number of young people in the population demographics, the government recognizes that the quality of education and training should be a major policy focus. Recently, private sector schools have found themselves in a more competitive environment and with the current rate of expansion more schools are being opened within a co-educational environment to cater to the diverse needs of the population. Regrettably, the quality of the service encountered in these private schools varies considerably and up to December 2006 there has been no national quality or accrediting framework for private schools.

Several private schools have sought accreditation from international organizations such as the Commission on International and Trans-Regional Accreditation (CITA), New England Association of Schools and Colleges (NEAS&C), European Council of International Schools (ECIS), Middle States Association of Colleges and Schools (MS-CES), North Central Association (NCA) and the Council of International Schools (CIS).

Accreditation is a voluntary activity which is deemed desirable by schools in order to demonstrate to parents and to students that the school has achieved and exhibits certain levels of quality, as certified by an independent and objective assessment. Accreditation is usually not mandatory, and a large number of private schools have no external accreditation.

From December 2006 all private schools in Dubai, but not all of the Emirates, must seek accreditation in terms laid down by the Knowledge and Human Development Authority (KHDA) which was developed internationally in conjunction with a number of recognised agencies, principal among which were the Council of International Schools and the New England Association of Schools and Colleges.

It is suggested that the criteria set by these international accrediting organizations, supported by the EdPERF scale, could offer a reliable base for the development of an industry specific instrument to measure perceived service quality in a private school environment. The instrument developed for this study has been adapted for the local culture and environment of the UAE, in which private schools currently operate.

The results obtained in this study are intended to help school managers identify areas in which customers are both satisfied and unsatisfied with the service they currently receive from the private school of their choice.

It is salutary to note that there is an abundance of schools in the UAE, so that it is a buyer's market, which pressurises schools to ensure that they offer best value and satisfaction to their customers who now, more than ever before, have a range of options.

1.3 LITERATURE REVIEW

1.3.1 A review of literature on 'Quality'

The work of Juran, Deming and Crosby, known collectively as the 'guru's of quality', has influenced this study in many ways. A brief summary is given of the work done by Philip B. Crosby, W. Edwards Deming and Joseph M. Juran:

William Edwards Deming is best known for his role in helping the Japanese manufacturing sector from 1950 to becoming a world leader in manufacturing and business development. He is recognized for his 14 points philosophy to practice continual improvement and think of manufacturing as a system, not as a collection of bits and pieces. Deming was also influential in the education sector and the British Deming Association was recognized as a fundamental partner, involved with schools and colleges, during the pioneering stage of Total Quality in Education.

Deming (1986) found quality to be a relative term that could change in meaning depending upon customers' needs. He found a philosophical difficulty in defining a 'quality' in that it translated the future needs of the user into measurable characteristics, so that a product could be designed and turned out to give satisfaction at a price that the user will pay in future.

Joseph Juran also assisted the Japanese in their rebuilding after World War II and while Deming's approach is *revolutionary* in nature, Juran's approach was more *evolutionary*. Whilst Deming referred to statistics as being the language of business, Juran claimed that money is the language of business and quality. Juran (1979) saw quality as 'fitness for

use' and defined as "customer" all the parties that were affected in some way by the product.

Phillip Crosby established the absolutes of Quality Management with his "*the only performance standard is Zero Defects*" theory. Crosby's philosophy differs significantly from both Deming's and Juran's in that Crosby focused on tracking costs of doing things wrongly - the price of non-conformance. Crosby, being the youngest of the 'gurus', had the benefit of learning from the deficiencies of earlier theories and suggested that there is no such thing as a varying "degree" of quality - it either exists or it doesn't. Crosby (1979) simply saw quality as 'conformance to requirements'. . He emphasised getting things done right the first time. The foundation of his approach is *prevention*.

Crosby, Deming and Juran agreed that it is the responsibility of **management** 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 action should lead to the fulfilment of that mission. These authors also agreed that management action is required to achieve improvements and that it is a long-term process that will not produce results overnight. A very important similarity found in the work of the gurus is that cost and quality are not in competition with each other. Quality processes are claimed to decrease cost as it reduces waste and eliminates the price of deficiencies. As philosophies, the theories of the three gurus go beyond the economic concerns of an organization; they also address an organization's employees as well. They give high priority to teamwork, cooperation and participation.

West-Burnham (1997) brings this closer to the educational setting by linking quality concepts to the school environment. He stresses that quality should be seen in terms of *relationships* rather than intangible goals. His view is that to see quality as an elusive concept is to deny the

possibility of attaining the required result. He proposes that school management should understand who their customers are and what they expect from the school. This is done by explaining *seven* components that defines the schools' customer:

- a) '*Values*' that will reflect the extent to which parents see education as an investment;
- b) '*Attitudes*' that are reflected in the involvement and commitment of the students and their parents in school related activities;
- c) '*Educational level*' of parents that should be considered in order to succeed with effective communication between the school and home;
- d) '*Expectations*' that would determine the degree to which the school is exceeding the requirements of its customers;
- e) '*Preferences*' that allow the customer to choose from a range of options including religious education, uniforms, pattern of the school day, etcetera;
- f) '*Social interaction*' that indicates the ethnic balance, culture, economic situation and employment status of the parents; and finally
- g) '*Commitment*' that indicates the success of the school in retaining students.

Once this information is clearly understood, management will be able to 'delight their customers' by supplying a service to the agreed specifications.

West-Burnham also finds that there are certain *actions* at the heart of quality management in schools:

- reporting on progress to parents;
- delivery of a challenging curriculum with relevant, up to date materials;

- effective classroom organization;
- flexible teaching strategies;
- development of social and intellectual skills
- programming options to ensure that individual rather than system needs are met

He comments that his list could continue indefinitely and that his approach endorses a flexible learning approach accompanied by continuous improvements concerned with adding value to the entire process. **His research has found that quality does not cost more and that by getting it right the first time the objective is achieved at minimum cost.** In essence he finds that quality means delivering more for the same input and reducing errors that in turn reduce waste and lowers costs.

Quality assurance in education is not a new phenomenon and the topic has been argued world-wide for many years. Recently, and importantly, Cheng (2003), a Professor at the Hong Kong Institute of Education, writes that education reforms are being experienced in *three* waves. The first wave focuses mainly on internal school performance, particularly the methods of teaching and learning; the second emphasizes stakeholders' satisfaction, organizational effectiveness and competitiveness; the third wave should be moving towards the new paradigm of education focusing upon globalization, localisation and individualization.

Zairi (1995) writes that the biggest challenge for educational institutions is to establish leadership styles that can bring about real change. The second biggest challenge is to re-examine everything they do, from the perspective of the customer. According to him the challenge for education is to redefine the meaning of quality assurance and to establish a culture of continuous improvement through measurement of

the value-addedness to customers, as opposed to compliance with bureaucracy.

In South Africa, Motala (2001) comments on the provision of quality education in the post-apartheid years by maintaining that adequate resources, learning facilities, equipment and sound management practices are preconditions for the provision of quality education. The main responsibility of the Chief Directorate in the country is to develop a set of generic performance indicators by which quality can be measured.

Joseph and Joseph (1997) write from the New Zealand perspective where education is seen as a commodity that can be traded in the marketplace. They believe that educational institutions need to achieve efficiency because these institutions must compete for finance and customers and, in order to compete effectively, the organization needs to distinguish itself from the competition. They have found that students evaluate the quality of the service they receive from an educational institution using a range of criteria which are likely to differ in importance.

Lagrosen et al. (2004) notes that the focus of service quality has been on satisfying the customer and that the customer should be encouraged to participate actively in the production of the service. Such participation needs to be encouraged and guided. They also found that in Sweden and Austria, culture has an influence on the practice of quality management and that the origins of these differences are rooted in tradition.

Parsons (1994), Doherty (1994), Lomax (1996) and West-Burnham and Davies (1997) all provide examples of how quality principles can be successfully (but by no means unproblematically) applied to schools. In addition, Leonard, Bourke and Schofield (2004) have found the following characteristics present in quality schools:

- Development of student potential, self-worth, competencies and attitudes.

- Promotion of quality teaching
- The school has a democratic and equitable school ethos and organization
- Effective leadership, collaboration and professionalism
- Development of quality relationships by effective communication
- High attendance and participation rates of students
- Quality assessments are implicitly and explicitly carried out at class and school level
- Community needs are being met

More ideas are found in Louise Stoll's paper on successful schools (Stoll, 1997) which identified *eight* key strategies:

- The focus should be on teaching, learning and authentic education
- A culture of high expectations must be promoted
- Offer every student as full a range of opportunities in as many fields as possible
- Develop an international perspective and a sense of global awareness
- Provide autonomy to the staff and management while maintaining accountability
- Ensure flexibility and a highly developed capacity to manage change
- Prepare consciously for the future through strategic positioning
- Target steady and sufficient funding to meet identified needs.

These findings are similar to the accreditation criteria set by the various international school accrediting agencies.

For the purposes of this study, a table was created by the author to compare the criteria set by various international accreditation organizations. This information was then used for coding similar groups of criteria together. A further analysis was then made by graphing the results to show the importance of each criterion in comparison to others

criteria used. A further discussion of this process follows in Chapter 2. These findings were not surprising as it compares favourably to the literature discussion above and highlights *four* dimensions of schools quality, namely:

- (1) Academic aspects,
- (2) Non-academic aspects,
- (3) School leadership, and
- (4) Support services.

These dimensions will be discussed in more detail later in the paper.

O'Neill and Palmer (2004) and Grönroos (1983) agree that 'quality' has *two* dimensions, namely the 'technical' and 'functional' dimensions. In the technical dimension the results of the service would pose the question: "What has been provided?". This may be easily measured and can be published in the form of statistics, grades and league tables. The functional dimension is more important, however, and refers to the way in which the service has been delivered. It would pose the question: "How has the service been provided?". Organizations use it to create a competitive edge and to ensure a personal service that satisfies the needs and wants of the customers.

It is within this dimension that each of the *four* service areas of schools will be examined, based on the results of the EdPERF instrument.

Given that the private school industry is a multi-billion dollar sector of the global economy, it follows that by applying competitive strategies those schools who apply the research evidence should become increasingly sophisticated in their search for a sustainable, competitive edge, and obtain the success which their endeavour deserves (McDonald, 2006). Nevertheless, many educators would hesitate to

describe their school as an organization with a competitive strategy, although school managers will naturally employ these strategies. McDonald further comments that schools are becoming more business-like in their approach and can be compared with the emergent private-enterprise organizations such as universities and hospitals.

The line between education and business is fading with the marketization of education. In the face of the growing realisation by governments that they can no longer provide quality education to their citizens, they, and their electorates, are turning to the private education sector for relief. In this scenario, competitive advantage in terms of the quality of what a given school offers becomes a vital factor in the equation of the design, curriculum and delivery of schools. Measuring the quality of service in education is increasingly important, particularly as fees introduce a more consumerist ethic among parents and students.

Firdaus (2006) confirms this by stating that since the 1980's service quality has been linked with increasing school profitability, and it is seen as providing an important competitive advantage by generating repeat sales, positive word-of-mouth feedback, customer loyalty and competitive product differentiation.

It is therefore no surprise that school managers and academics alike are keen to accurately measure service quality in order to gain a better understanding of its essential antecedents and consequences, and ultimately establish methods for improving quality to achieve competitive advantage and build customer loyalty. The development of the EdPERF instrument intends to help with this process by supplying information about the perceptions of parents and students regarding the service delivery of their respective schools.

1.3.2 Review and development of the HEdPERF Instrument

The work of Firdaus has had a vast influence on the research and literature review that follows. The development and application of an instrument to measure service quality in Higher Education has shown that the education sector was in need of a generic measure to determine the perceptions of its customers. Even at school level it is not inappropriate for managers to have an idea of how well the service level they deliver matches their customers' expectations.

Firdaus (2004 and 2006) developed the HEdPERF instrument from the standpoint that students were the primary customers. It not only incorporates academic components, but also includes aspects of the total services environment as experienced by the student. It is claimed that this measuring scale could improve service performance in Higher Education by indicating areas for improvement. The appropriateness of the HEdPERF instrument to the school environment originates from its extensive use in the education field (Firdaus, 2004 and 2006).

The original HEdPERF instrument consisted of *six* quality dimensions, namely non-academic aspects, academic aspects, reputation, access, programme issues and understanding. These were refined into *five* dimensions in 2006 with the exclusion of the 'understanding' dimension.

Hittman (1993) suggests that previous attempts to measure service quality in education have been too narrow, with an over-emphasis on the quality of academics and too little attention paid to the non-academic aspects of the educational experience. Firdaus states that it is important to identify critical factors of service quality from the perspective of the students, whom he sees as primary customers. Student experience in education should be a key issue which need to be addressed by performance indicators. In his research, Firdaus continuously reminds

the reader that service quality is an elusive concept and that the generic framework is weighed down by the problems associated with the unique characteristics of service industries. This supports the earlier work of Zeithaml et al. (1985); Parasuraman et al. (1985); Carman (1990) and Bolton and Drew (1991a).

The debate over the advantages and disadvantages of measuring service quality is still unresolved and these arguments generally make reference to the characteristics of the scales and question their validity and reliability. Firdaus (2004) cautions readers that the generic instruments should be seen as 'skeletons' that often require modifications in order to fit the specific situation and application for which they are used.

Soutar and McNeil (1996) note that one of the problems with performance indicators is that they become measures of *activity*, rather than true measures of the *quality* of educational services provided for students. Nevertheless, many researchers agree that the assessment of customers' perceptions of service quality may depend only on performance, suggesting that performance-based measures, like SERVPERF and HEDPERF, explain more of the variance in the overall measure of service quality (Oliver, 1989; Bolton and Drew, 1991a & b; Cronin and Taylor, 1992; Boulding et al., 1993; Quester et al., 1995).

The author believes that the implementation of a simplified version of the HEDPERF instrument in schools could be used effectively to indicate similarly the areas for service improvement. Private schools, in particular, finding themselves in a more competitive environment where customers' perceptions of the delivered service could determine the success or failure of the enterprise, would do well to consider a systematic and regular survey of student and parent perceptions of service delivery to inform them of areas of customer satisfaction and

dissatisfaction as a means to ensure continual satisfaction with school performance.

1.4 RESEARCH QUESTIONS

1. Is there a significant correlation between the perceptions of parents and students in relation to perceived service quality?
2. To what extent does the data, as generated by the EdPERF instrument, in measuring the perceived quality of service delivery, identify areas of satisfaction/dissatisfaction for parents and students?
3. Does the EdPERF instrument provide an effective measure of perceived service quality in secondary schools, as judged by the service providers?

CHAPTER 2

METHODOLOGY

“Live as if you were to die tomorrow. Learn as if you were to live forever”

Mahatma Gandhi

2.1 Introduction

Wide ranging investigations into quality management in education have examined ways in which student voice is incorporated into the quality process. Increased competition and limited resources has made it important for school management to understand the influence of service quality on the primary customer, in this case, the students and parents. As outlined in Chapter 1 various instruments exist to measure customer satisfaction in Higher Education, but very little research has been done in the school milieu. Even though most of this investigation has been done in Higher Education, it is proposed here that the same instruments can be adapted for use in the school sector. In the private school environment one finds many of the same characteristics as are found in Higher Education organizations – fee paying customers, absence of rigid regulations, freedom of customers to choose a supplier, and more. It is a *sine qua non* that the quality of the delivered service determines the success of most organizations, and parents, as customers will only support a school if their perception of the delivered service matches their conception of value for money.

Traditionally quality in education has been defined in terms of standards of excellence. For this reason it was decided to research the criteria used by international school accreditation organisations and to select from them a set of key criteria to use as a measure of the perceived quality that is associated with these organizations. Peters (1969) found that it is

not only the *properties* of quality that are thought to be valuable, but also the *merit* intrinsically associated with these properties.

Customer satisfaction has been found positively associated with pupils' acceptance of educational values, motivation and commitment to school (Goodenow and Grady, 1992; Wehlage et. al, 1989). Gray and Wilcox (1995) suggests that pupil satisfaction, in terms of the education received, is one of the most important quality assurance performance indicators, because of its relationship to school effectiveness.

School dissatisfaction, on the other hand, has been found to be positively associated with behavioural problems and poor school achievement (Baker, 1998), predominantly due to the lack of motivation to work harder. Poor school satisfaction has also been shown to have negative school consequences, such as school alienation and discontent (Fine, 1986).

2.2 Research objectives

The purpose of this study has been to develop an instrument to measure the perceived service quality in private secondary schools in the UAE. The results aim to evaluate the collected data in order to determine the areas of perceived improvement in the quality performance of selected schools. This was done by comparing parent and student responses and determining the correlation in the perceptions of these two groups. Codrington (2004) writes that international schools are increasingly exposed to philosophies that originate in the business or corporate sector and this has lead the author to the development of a generic, industry-specific instrument, adjusted for the secondary school sector and local culture, in order to demonstrate that school management would benefit from measuring customer satisfaction, thus encouraging customers to

comment on, and influence the delivery and development of the education provided.

The EdPERF instrument is directly related to the HEdPERF instrument that was demonstrated to be useful in the Higher Education sector (Firdaus, 2004 and 2006). The results of this study identify areas for improvement of processes in schools that could be contributing factors in increased satisfaction levels of customers and possibly result in an increase in student enrolment.

A statistical analysis of the gathered data was used to analyse the results in an attempt to reveal areas of satisfaction and dissatisfaction as perceived by the primary customers (students and parents) and to prove a possible correlation between parent and student perceptions.

2.3 Development of the EdPERF instrument

The EdPERF instrument is developed with the aim of identifying the service dimensions of schools that lack in perceived service quality. The questionnaire is based on the HEdPERF instrument that was developed in 2004 by Firdouz, (see page 8).

Currently a similar generic instrument does not exist for school use and schools have, in general, designed their own survey instruments with a diversity of outcomes. As a result it has been difficult for schools to benchmark their own performance against that of any other school in the UAE or internationally. It is the opinion of the author that service quality in schools should be just as important as the perceived service quality of students in Higher Education and that an unbiased comparison of the quality of education services could lead to improved services in the industry.

Firdaus (2005) argues that it is more practical to develop an instrument exclusively for a particular industry, rather than a standard measuring scale applicable to a wide variety of services. For this reason the HEdPERF instrument developed in this study was taken as a basis for the development of an instrument that would measure '*perceived service quality*' in schools. It is designed for use in secondary schools with respondents from grades eight to twelve and can be used as an industry measure for benchmarking the performance of schools in the region and possibly internationally.

In the course of the development of the EdPERF instrument the criteria that are used by international accreditation agencies to set quality standards in educational institutions were examined, some were selected, and others adapted to appear as performance indicators. The rationale for this approach was derived from research evidence which indicated that a number of different factors, other than academic achievement, were observed to exist in reputed schools worldwide and these had a significant effect upon the level of service provision, (Teddle, Reynolds and Sammons, 2000).

Murphy (1998) proposes that being found worthy of accreditation by experienced colleagues is a source of satisfaction to schools, and that parents are becoming familiar with the process of accreditation and are beginning to feel that placing their children in school which is not accredited is a risk they do not wish to take. A number of well reputed schools in the UAE have opted to have a recognised accreditation from an international awarding body in order to provide an accepted standard for the delivery of services.

A comparative study of international accreditation agencies and the accreditation criteria used by each organisation was tabulated for easy reference in *Table 1* (see Appendix A) and then coded into various

general statements in *Table 2* below. Similar criteria used by the various organisations were identified, coded and totalled to determine the importance of a specific criterion as measured by the amount of organisations that use the same criterion. *Table 2* shows the criteria statements and the similarities that were found between the various organisations with total counts for each criteria statement. A larger version of *Table 2* is available in Appendix B.

TABLE 2: SUMMARY OF ACCREDITATION CRITERIA

Table 2: Summary of the accreditation criteria as applied by international school accreditation bodies

COMPARATIVE SUMMARY OF INTERNATIONAL ACCREDITATION CRITERIA USED FOR K-12 SCHOOLS																						
Name of organization	Criteria used																					
	Government authorized school	Health & Safety awareness	Effective Communication	Clear Vision, Mission & Objectives	Effective Leadership	Financial resources well used	Adequate facilities	Appropriate curriculum	Classroom resources	Support Services	Positive school climate	Continuous assesment	Continuous improve-ment	Admission screening	Parental involve-ment	Qualified staff	Promote lifelong learning	Extra-curricular activities	Students have positive attitude	Inter-cultural experiences	Recognise differences in learning styles	Special needs program
Commission on International and Trans-Regional Accreditation (CITA)	1	1	1	1	1	1	1	1	1	1	1	1	1									
New England Association of Schools and Colleges (NEAS&C)				1	1				1	1	1	1		1	1	1						
European Council of International Schools (ECIS)		1		1		1	1	1	1	1						1	1					
Middle States Association of Colleges and Schools (MS-CES)		1	1	1	1	1	1	1	1	1	1	1	1			1		1				
North Central Association (NCA)			1		1	1	1	1	1			1	1			1						
Office for Standards in Education (OFSTED)		1		1				1		1	1	1									1	
Council for International Schools (CIS)		1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1		1	1	1
International Baccalaureate Organization (IBO)				1			1	1	1	1		1	1		1	1		1				
European Foundation for Quality Management (EFQM)		1	1	1	1	1	1								1	1						
TOTALS	1	6	5	8	6	6	7	7	7	7	5	8	6	1	4	7	2	4	1	1	1	1

To further emphasise the importance of each criterion a ranking process was applied to the totals in *Table 2* and a bar chart constructed, as shown in *Figure 1* below:

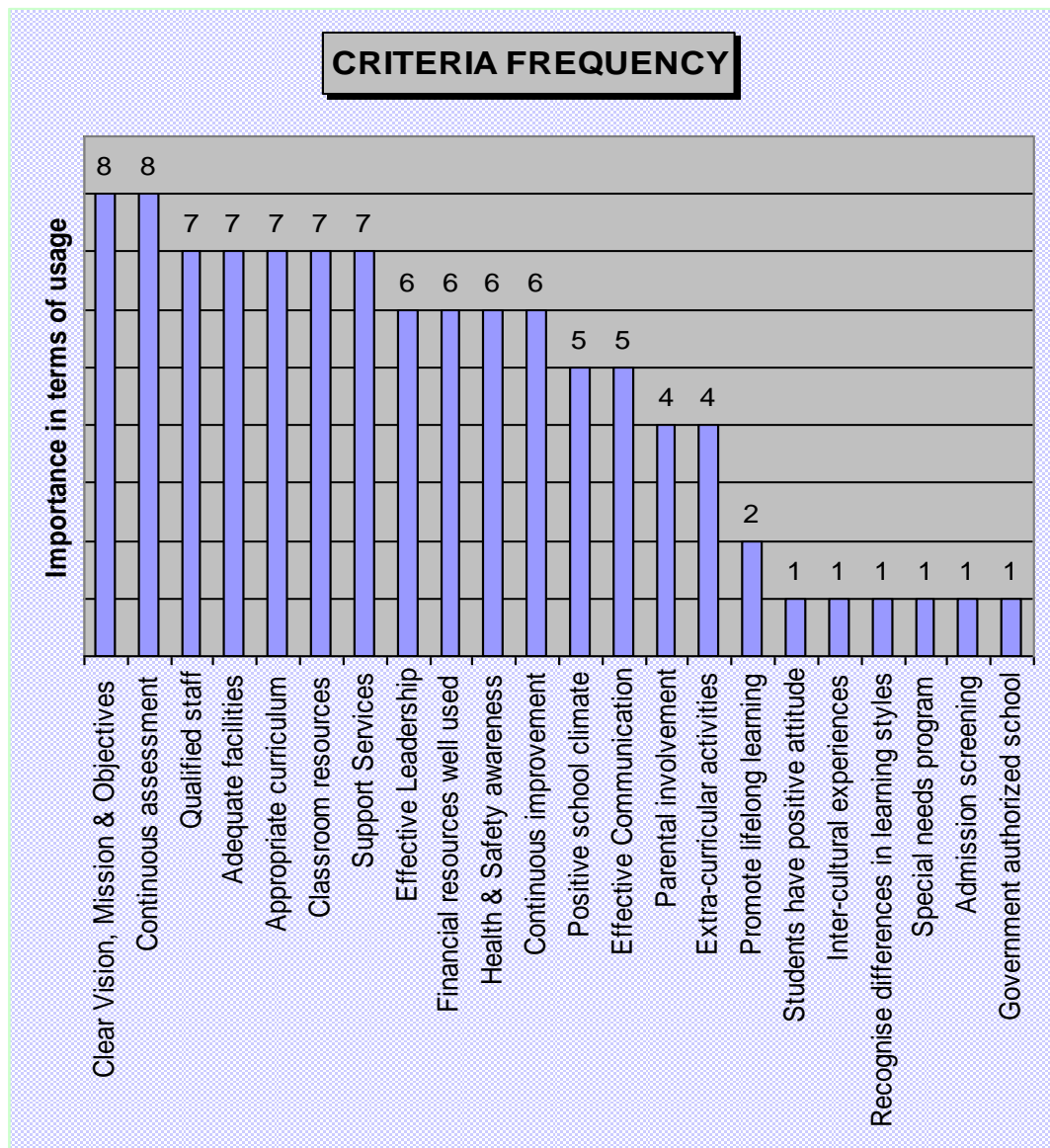


Figure 1: Frequency of criteria statements used by international school accreditation organisations

The quality criteria, as identified above, were categorised into *four* dimensions to incorporate not only the academic components, but also aspects of the total service environment as experienced by the schools' customers. These dimensions are grouped as '*academic aspects*', '*non-academic aspects*', '*school leadership*' and '*support services*'. Each of these dimensions represents an important part of the service delivery process and, for purposes of this research, it is assumed that they have an equal impact on the perceived satisfaction of customers.

The rationale for the grouping of quality dimensions into categories based on operational and functional similarity by the author was intended to make the understanding of questioning more 'user-friendly'. By focusing attention on clusters of like concepts, it was hoped to elicit more valid and reliable data, in an attempt to identify service gaps that require attention by the education institution under review. The justification for the inclusion of each of the quality dimensions and the reference made to it by literature and accreditation organisations is described below.

2.3.1 Academic Aspects

This dimension represents the important activities that ensure effective learning takes place. Critical components of this dimension, as identified in *Table 2* and presented in *Figure 1*, include a curriculum that allows for student participation and interaction, individual student attention, qualified and knowledgeable teachers, resources to assist with teaching and learning, effective use of test and exam results and sufficient school hours to complete the curriculum. Assessment of students was the joint first ranked criterion as indicated by accreditation organisations and is seen as an easier way to measure the success of an individual student's performance as well as the performance of the school as a whole. The author does not imply that this is a fair or exclusive way to measure the performance of schools, as it is argued that any assessment is subjective and is influenced by a number of variables. The inclusion of a programme for 'special needs' students is an additional aspect of academic support that is considered in this dimension. More schools are currently paying attention to this vital issue and the inclusion of moderately disabled children into mainstream schools is a burning issue when measuring the value of the service delivered by schools. Boscardin and Jacobson (1997) explain that schools can serve their students better by fostering a sense of community and promoting ways of including students that would

normally be pulled out of mainstream education. Government initiatives have started the process of inclusion in the UAE and private schools are expected to follow this example soon.

2.3.2 School leadership

“Without appropriate leadership no quality programme will work; only dynamic leadership can create the commitment to drive the strategy.”

West-Burnham (1997, p.112)

Another highly ranked criterion is the ‘leadership’ dimension on which depends the effective communication of the corporate statements in the form of the vision, mission and objectives of the school. Vision and mission statements are important to any organisation that want to improve on its products or services and aim to reach a predetermined goal. All the accreditation organizations examined required a school to produce a vision and mission statement in order to be the guiding philosophical force behind any decisions made by the schools’ leaders. Other important factors that were identified include effective communication structures between school, home and community; regular reporting of results to parents; the effectiveness of management in responding to inquiries and complaints; the existence of a continuous improvement plan; and financial management of resources.

2.3.3 Non-academic factors

Quality services in a school environment do not only include the academic functions, but can significantly depend on the provision of non-academic support of the service delivery. This dimension contains variables that are essential for the fulfilment of the total service package, and relates to duties and responsibilities carried out by non-academic staff (Firdaus, 2006).

The non-academic factors that were apparent from the comparison in *Table 1* and the ranking in *Table 2* included adequate space in the school building for the number of students enrolled; a non-discrimination policy followed by all faculty and staff members; provision of recreational facilities and extra-curricular activities; emotional connections that respondents have made with the school and the perceived reputation of the school in the community.

2.3.4 Support Services

Studies have demonstrated that quality of support services can be just as important as core academic strength in influencing students' choice of school (Park and Lessig, 1977; LeBlanc and Nguyen, 1999). A whole school environment consist of the classroom environment, recreational facilities and the support services of the school clinic and counsellors, as well as parental support and strict adherence to health and safety regulations. In the UAE context, the provision of food and bus services are becoming more important determinants of successful service provision as more mothers tend to work, school hours are relatively long and serious traffic congestion places more pressure on schools to provide adequate transportation for students to and from school.

The support services of a school have an important part to play in the perceived satisfaction of the customers. True 'caring' for pupils is the heart of schooling and enabling a child to develop as a person is essential for happiness in school (Marland, 2001).

2.4 Structure of the EdPERF instrument

The survey instrument itself is divided into *three* sections (A to C), **Section A** was used for the collection of personal information of

respondents. In this Section the respondents were assured of complete anonymity and the data collected in this section was used to indicate the gender of the respondents, their relationship with the school, the years that the respondent has been involved with the school and their general perception of the services received from the school. Tick boxes were provided to make the completion process easier and less time consuming.

Section B consists of *twenty six* questions with a choice of perception responses listed on a five point Likert Scale that ranged from (1) 'Strongly agree' to (5) 'Strongly disagree'. This scale was reduced from the original *seven* point scale in the HEdPERF instrument to a *five* point scale in the EdPERF instrument to facilitate completion of the questionnaire.

The relevant scale is clearly indicated at the top of the table to minimise any confusion to the respondents. Positive statements were used in the EdPERF questionnaire in comparison to a mix of positive and negative statements in the original HEdPERF instrument; once again, this was done to assist the understanding by younger respondents.

Questions are designed to focus on the *four* quality dimensions as indicated: school leadership, academic aspects, non-academic aspects and support services. The quality dimensions are clearly noted on the instrument to help respondents to focus on the relevant areas and to simplify the analysis and coding of data.

Section C includes *three* open-ended questions and was used in the same way as the HEdPERF instrument to allow respondents the opportunity to provide additional information as to their perceptions of service quality. These questions are not directly phrased, but rather

allow the respondent to indicate his/her perception of the achievements, failures and areas for improvement that currently exist in the school.

2.5 Steps in the development and validation process

The various steps followed in the development and validation of the EdPERF instrument shown by means of a flow chart in *Figure 2* below. The development process was initiated by a comparative study of international accreditation organisations, followed by the development of the instrument, administering of the survey, correlation tests to determine the degree of concurrence between parent and student responses, identification of areas of satisfaction/dissatisfaction, reporting of results to Principals and receiving feedback from them, and finally a review of the finding in order to decide on the proposed EdPERF instrument or alternatively to restart the process.

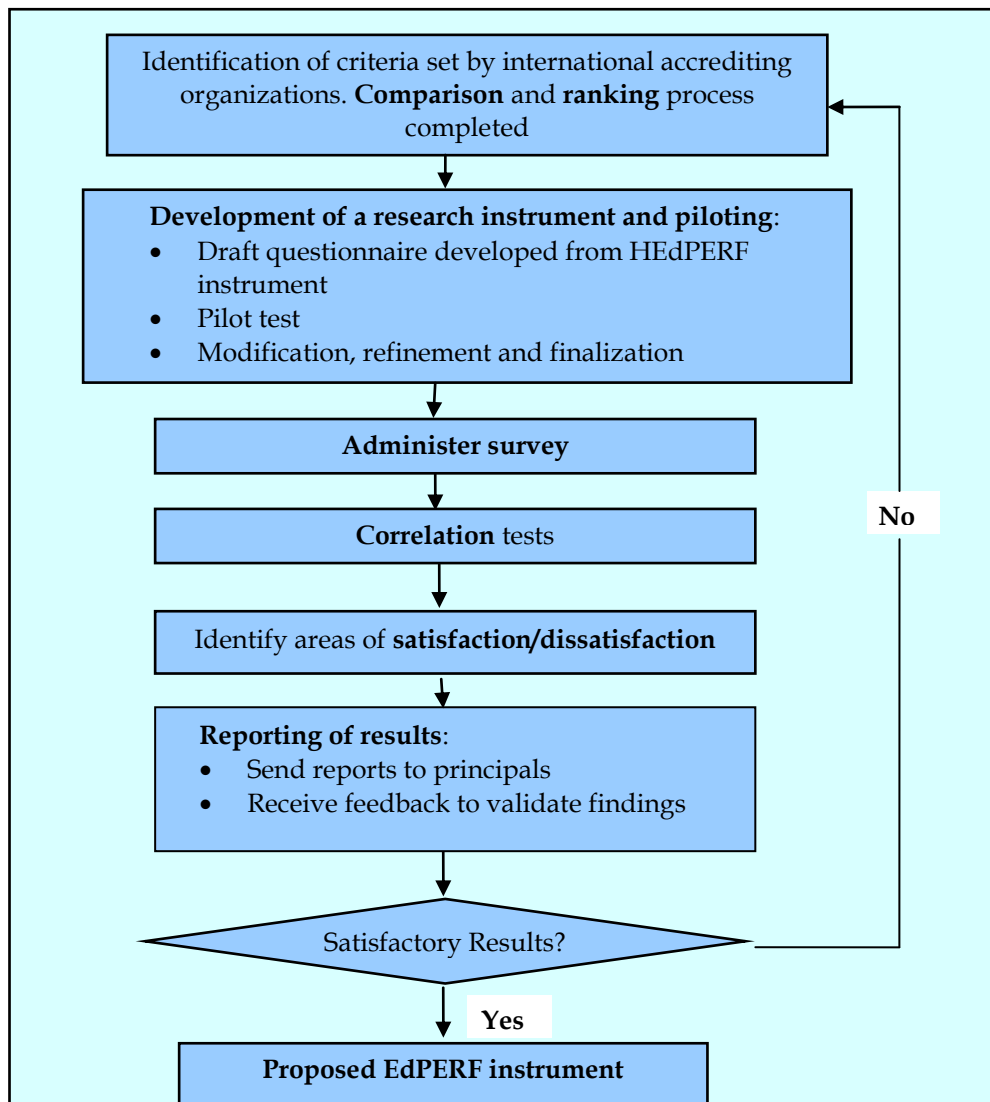


Figure 2: Development of the EdPERF instrument

2.6 Administration of the Survey Process

2.6.1 Respondent selection

The respondents included randomly selected students from grades eight to twelve and their respective parents. Both parents and students completed the same questionnaire to allow the analysis of correlation between the perceptions of the two groups. A pilot study was carried out at a school in Abu Dhabi and involved 50 students and their parents. Further collection included 400 students (and their parents) in *five* private schools in the Dubai Emirate. All the schools have similar educational regulations and are managed by the same educational management company. Questionnaires were randomly distributed to

students of both sexes. Within the context of segregation it is noteworthy to mention that some schools would only have female respondents and others only male respondents. It was interesting to note that both mothers and fathers responded almost equally to the questionnaire.

2.6.2 Pilot Study

A community school in Abu Dhabi was identified as an appropriate site for a pilot study because of its proximity to the author and its mix of international students that compared well to private schools in Dubai. Fifty students were randomly selected and given a student and parent questionnaire to take home, complete and return to school. Unfortunately the returns were very low (at fifteen percent) and the conclusion was reached that this method of distribution was not successful. In order to increase returns it was deemed necessary to complete student questionnaires in a classroom setting. Class teachers would then have to play an active role in the collection of the parent responses from students over a period of two weeks. Parent returns were perceived to be problematic and it was realised in advance that the success of returns would depend heavily upon the follow-up methods used by the teachers and management of the school under review.

No problems were found with the content of the questionnaire itself during the pilot study and corrections made to the final questionnaire included only the shading of the various service areas to ensure that respondents were able to read the information more easily.

2.6.3 Data Collection

Prior to the administration of the questionnaire, participation in the study was requested from the Principals of the schools involved and

their cooperation was established to be a key to the success of the data collection process. As a result of the poor response during the pilot study, it was decided to obtain students' responses in a classroom situation where participation would be compulsory and completed questionnaires returned immediately.

Teachers were requested to answer any questions that students may have in understanding any of the items. Parent surveys, corresponding to the number of the student surveys, were then sent home and students were reminded to return surveys within two days. This initial deadline was set in order to create a sense of urgency for the respondents and it was used to motivate parents to complete questionnaires. After the two day period the school was encouraged to follow up and contact parents who had not yet responded. This method required the full support of school management and was found to have a variable success rate across the schools.

A more effective parent data collection could have been effective if presented during a parent-teacher conference or other gathering of parents, where the questionnaires would be completed and collected back in the same manner as the student questionnaires. The author believes that the culture of the UAE is partly to blame for the poor response rate that was noted from parents at some schools. In general, the population is not encouraged to show true emotions or complain about poor services. Service quality is accepted without much arguing and although people will complain to other members of the community it seldom leads back in any positive sense to the school where some form of corrective action could be contemplated.

Distribution of the questionnaire, to the five schools in Dubai, was undertaken with the assistance of the education management company who owned or managed the schools. Each school received a

parcel containing 80 student questionnaires (each labelled with a unique number), 80 parent questionnaires (in envelopes and numbered in a corresponding way as student questionnaires), a letter explaining the procedure to each principal and an instruction sheet for each teacher that would be present during the completion process. Principals were assured that the completion process would not take longer than fifteen minutes and they were urged to complete the questionnaire on the first day of the week, during school hours. Parent questionnaires were then sent home and collected throughout the rest of the school week. This allowed for follow up and repeated reminders to students and parents. Although responses were good at first, it was found that with time, further responses slowed down by the end of the second week a final collection was carried out.

2.7 Statistical analysis applied to data

Various statistical tests were applied to the SPSS programme together with an analysis of data in Excel spreadsheets. As the perceptions of the parents and students were determined to be a critical aspect of the results, a correlation of student and parent responses were carried out and scatter plots were drawn to indicate any correlation that was found in the data. Bar graphs were drawn to indicate areas of satisfaction or dissatisfaction in relation to the factors under consideration. Reports were then sent to each of the Principals explaining the methodology and results for their individual school. Principals were invited to comment on the findings and their perception of the accuracy thereof. In order to ensure effective feedback, interviews were conducted with each of the five Principals.

CHAPTER 3

RESULTS

"The only real mistake is the one from which we learn nothing"

John Powell

3.1 Introduction

EdPERF was designed to measure perceived service quality by analysing *twenty six* factors in *four* key areas of the school's service delivery as detailed below:

(1) Leadership:

- Clearly communicated vision and mission statements
- Communication between management, staff, parents and students
- Effective management of the school
- Regular reporting of examination results
- Promptness in dealing with inquiries and complaints
- Effective use of financial resources
- Continuous improvement

(2) Academic success:

- Qualified and knowledgeable teachers
- Personal attention provided to students
- School hours are adequate to complete the curriculum
- Challenging curriculum
- Effective special needs programme
- Sufficient resources to assist with teaching and learning

- Tests and exams are effectively used to measure progress
- (3) *Non-academic provision:*
- Facilities adequately house all students
 - Reputation of the school compared to others in the area
 - Non -discrimination and equal treatment of students
 - Friendliness of the administration staff
 - Recreational facilities
 - Extra curricular activities
- (4) *Support Services:*
- Resources in the school clinic
 - Healthy food options at the cafeteria
 - Counselling services to support teachers and students
 - School bus service
 - Active involvement of parents in all aspects of the school life

The instrument measures respondents' perception in *five* areas on the Likert Scale. This classifies responses as:

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

3.2 Analysis of responses

A total of *four hundred and fifty four* (454) responses were received which reflects on a 57% response rate. Of this percentage, 58% was received from students and 42% from parents. 229 Responses were received from male respondents, 222 from females (3 respondents did

not answer this question). The average years that respondents have been involved with the particular schools were found to be between six to eight years and respondents indicated that they were in general satisfied with the service delivery of their school of choice.

Each response was coded and responses were entered into an Excel spreadsheet in representative columns. Differentiation was made for the *four* different areas of service delivery and data was entered accordingly. For ease of comparison, all mean values and totals were computed to percentages and then reduced to represent the actual scores as originally indicated on the five-point Likert Scale.

3.3 Individual school results

Individual results for each school were first prepared in order to represent each functional area as mentioned above. Thereafter reports were compiled and sent to each of the Principals (see Attachment B for an example). The analysis of totals and mean values were graphed to show an easily interpretable breakdown of the actual results. Comparative graphs were constructed to identify the similarities and differences between student and parent responses. Following this, the totals of both student and parent responses were drawn up to indicate the areas of customer satisfaction and dissatisfaction as perceived by the respondents. Bar graphs are included to show the perceived delivery of service quality at each of the schools under review.

SCHOOL A

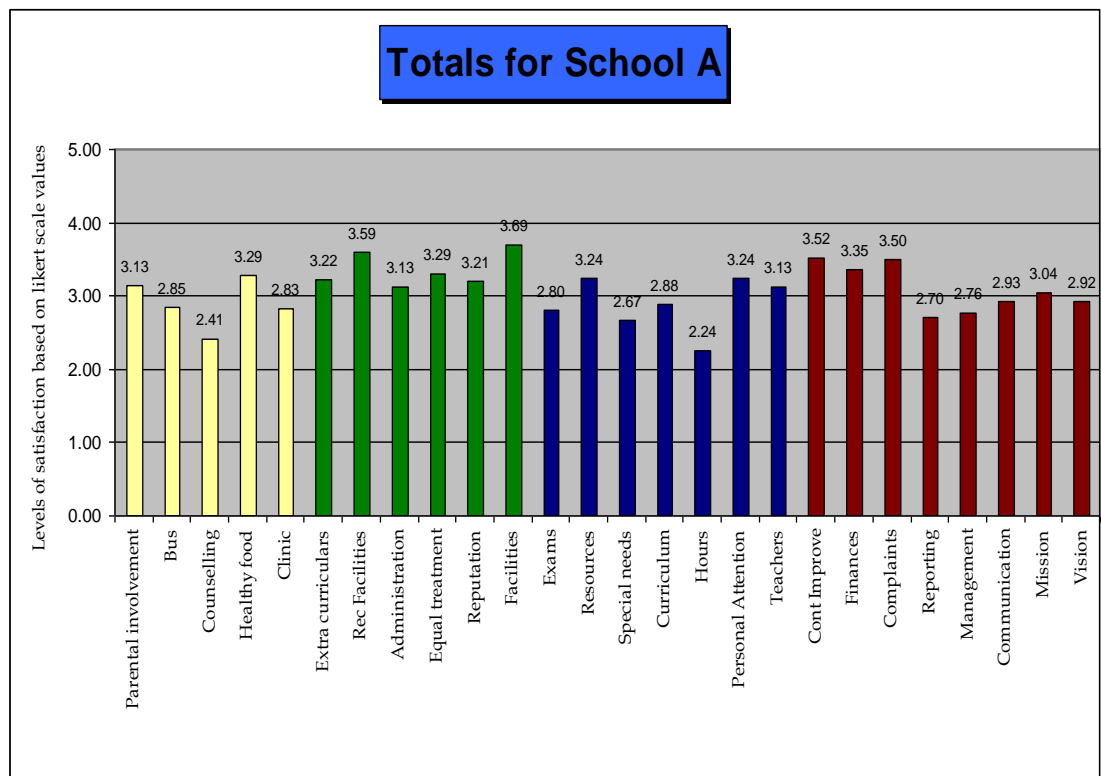


Figure 3: Totals of parent and student responses at school A

The combined data for students and parents shown in *Figure 3* indicates that the areas of customer *satisfaction* include:

- the reporting of results to parents and students
- school hours
- handling of students with special needs
- examinations and counselling services

Students and parents are generally *dissatisfied* with:

- the handling of complaints and queries
- management of finances
- continuous improvement of services
- facilities
- equal treatment of students by staff
- recreational facilities
- the lack of healthy food options.

SCHOOL B

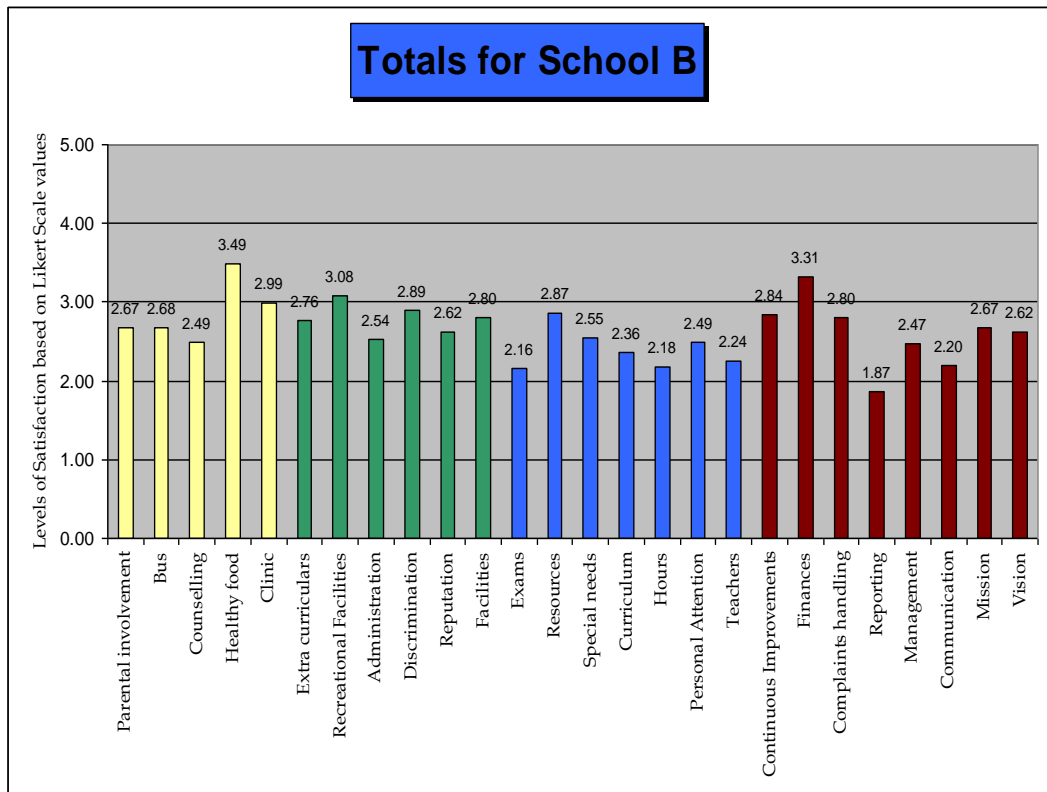


Figure 4: Totals of parent and student responses at school B

The combined data for students and parents shown in *Figure 4* indicates that the areas of customer *satisfaction* include:

- the reporting of results to parents and students
- handling of examinations
- school hours
- teaching staff and
- the curriculum

Students and parents are generally *dissatisfied* with:

- the management of finances
- availability of healthy food options
- equal treatment of students by staff and
- recreational facilities

SCHOOL C

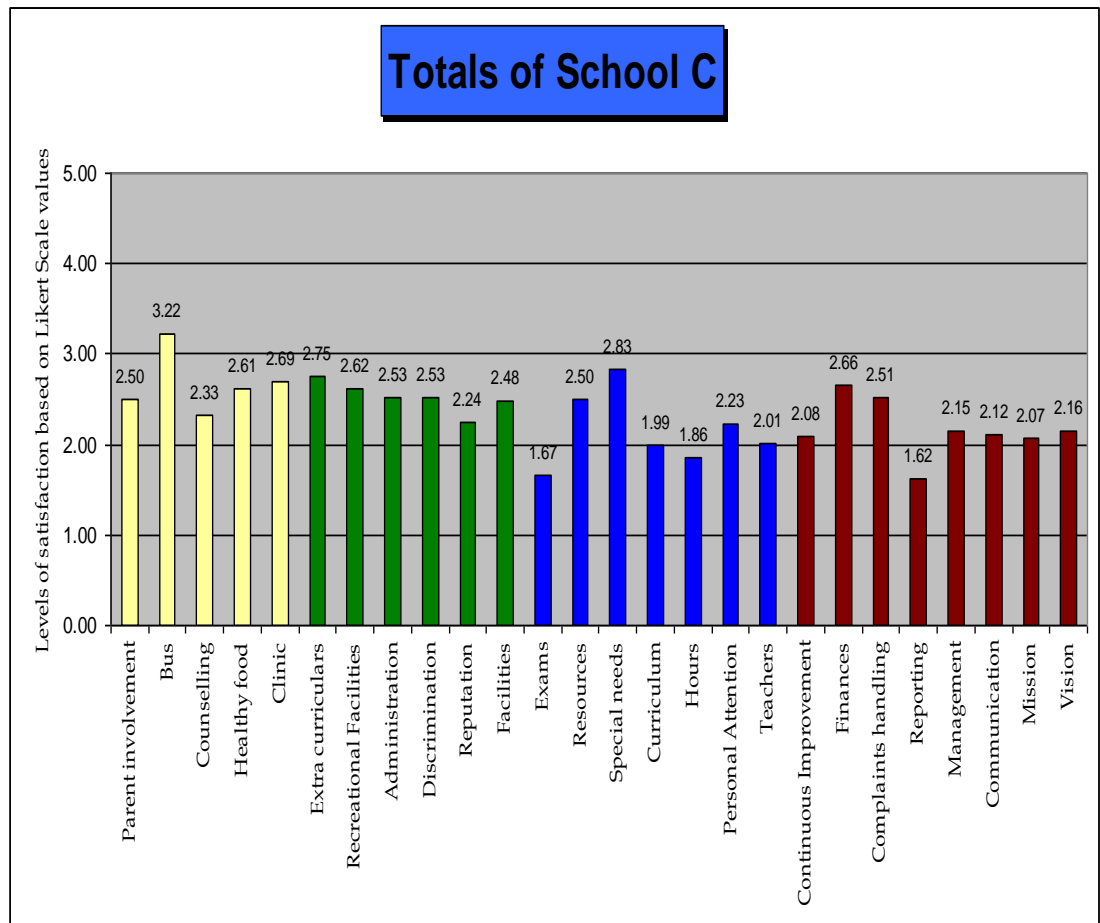


Figure 5: Total responses of parents and students at school C

The combined data for students and parents shown in *Figure 5* indicate that the areas of customer *satisfaction* include:

- the reporting of results to parents and students
- academic success and,
- most of the activities included in the areas of 'School Leadership' and 'Academics'.

Students and parents are generally *dissatisfied* with:

- the management of finances,
- the lack of special needs programmes,
- extra curricular activities and
- the bus service.

SCHOOL D

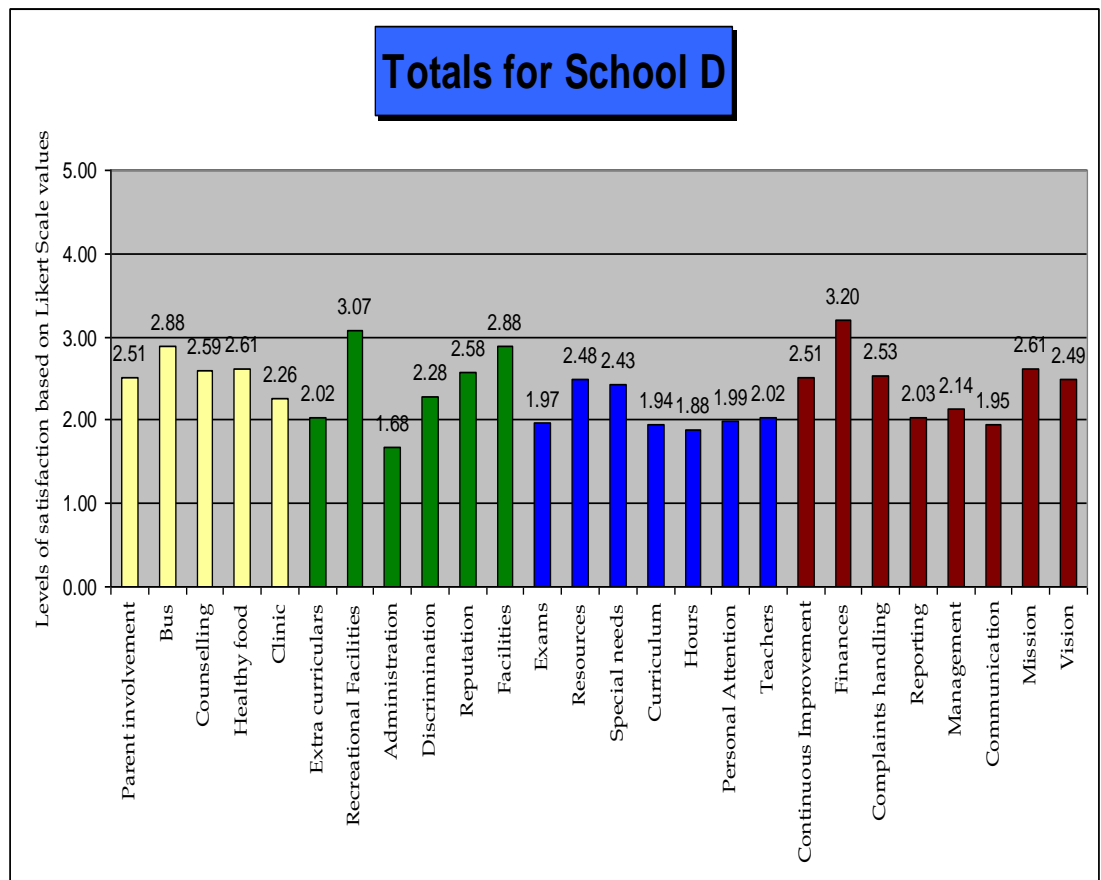


Figure 6: Total of parent and student responses at school D

The combined data for students and parents shown in *Figure 6* indicates that the areas of customer *satisfaction* include:

- communication between management and students/parents
- reporting of results
- personal attention provided to students
- curriculum delivery
- management of examinations and testing
- the friendliness of the administration staff

Customers are generally *dissatisfied* with:

- the management of finances
- the recreation and other facilities provided and
- the lack of/quality of the bus service

SCHOOL E

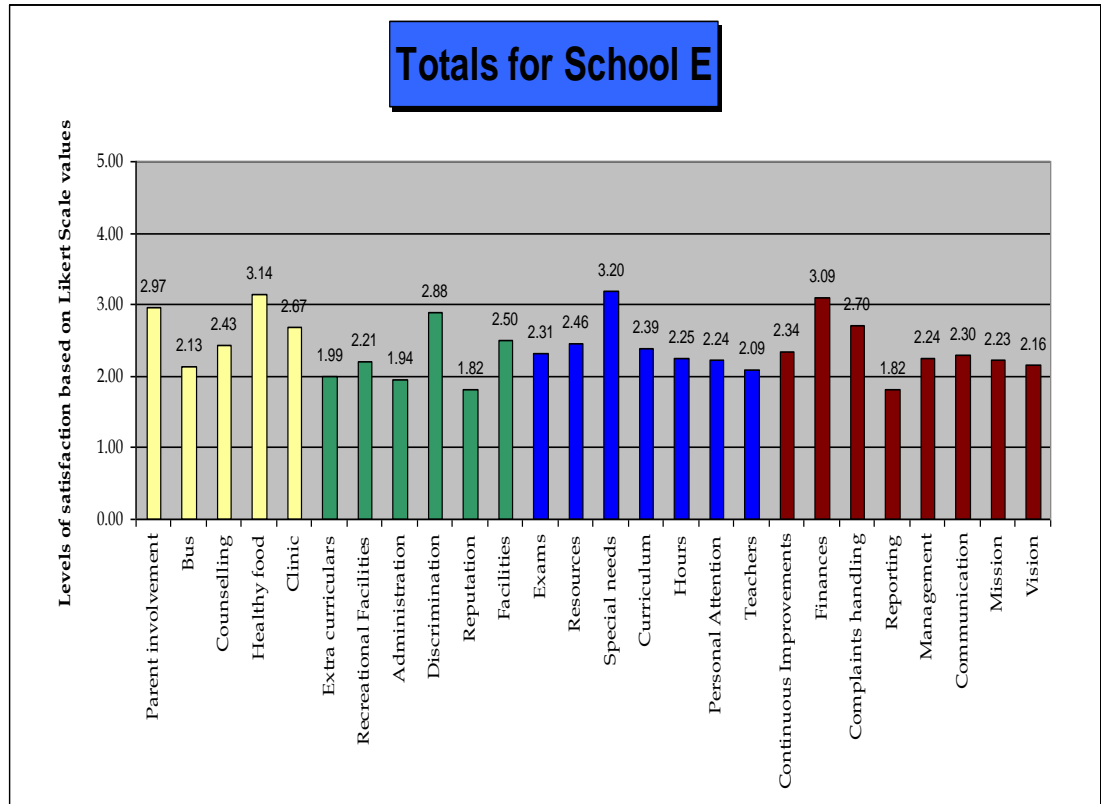


Figure 7: Totals of parent and student responses at school E

The combined data for students and parents shown in *Figure 7* indicates that the areas of customer *satisfaction* include:

- reporting of results to parents/students
- the reputation of the school
- extra curricular activities and
- sports facilities.

Parents and students are generally *dissatisfied* with:

- the handling of complaints and queries
- management of finances
- special needs programme
- equal treatment of students
- clinic facilities
- lack of healthy food options and
- parental involvement

A summary of the responses found for each school (A to E) is listed in *Table 3* below. The figures represent the mean scores and are presented in the same format as the original five-point Likert Scale used in the survey instrument.

3.4 Summary of individual results

Table 3 below shows comparative results for each of the *five* sample schools.

Please note that lower values (1.0 – 2.5) indicate areas of better performance and higher values (2.6 – 5.0) indicate areas of concern or dissatisfaction. This is a direct result of the Likert Scale that was applied to the EdPERF instrument, that measures 1 as strongly agree to 5 as strongly disagree.

Quality Indicators	A	B	C	D	E
School Leadership					
Vision	2.92	2.62	2.16	2.49	2.47
Mission	3.04	2.67	2.17	2.61	2.52
Communication	2.93	2.2	2.12	1.95	2.30
Effective leadership	2.76	2.47	2.15	2.14	2.35
Regular reporting	2.70	1.87	1.62	2.03	2.01
Inquiries and complaints	3.50	2.8	2.51	2.53	2.81
Financial management	3.35	3.31	2.65	3.20	3.12
Continuous improvements	3.52	2.84	2.08	2.51	2.66
Academic Aspects					
Teachers	3.13	2.24	2.01	2.02	2.30
Personal Attention	3.24	2.49	2.23	1.99	2.44
School Hours	2.24	2.18	1.86	1.88	2.08
Curriculum is challenging	2.88	2.36	1.99	1.94	2.31
Special needs programme	2.67	2.55	2.83	2.43	2.73
Classroom resources	3.24	2.87	2.50	2.48	2.71
Effective use of exams	2.80	2.16	1.67	1.97	2.18

Non Academic Aspects					
Facilities	3.69	2.80	2.48	2.88	2.87
Reputation	3.21	2.62	2.24	2.58	2.49
Discrimination	3.29	2.89	2.53	2.28	2.77
Administration staff	3.13	2.54	2.53	1.68	2.36
Recreational facilities	3.59	3.08	2.62	3.08	2.91
Extra Curricular activities	3.22	2.76	2.75	2.02	2.55
Support Services					
Clinic	2.83	2.99	2.69	2.26	2.69
Healthy food options	3.29	3.49	2.61	2.61	3.03
Counselling	2.41	2.49	2.33	2.59	2.45
Bus service	2.85	2.68	3.22	2.88	2.75
Parental involvement	3.13	2.67	2.50	2.51	2.76

Table 3: Comparative results per school

Table 3 indicates that scores range from 1.62 to 3.69, and that across all the schools, there was a general agreement from customers as to which areas were satisfactory and which specific service areas, were unsatisfactory. For example, regular reporting, school hours, challenging curriculum and effective use of examinations are regarded as areas showing high levels of service provision, whilst concern is expressed with regard to the management of finances. Table 3 also allows for inter school comparisons of areas of satisfaction and dissatisfaction.

Figure 8 below represents the total responses of all *five* schools and allows for a comparison of perceived satisfaction levels in each of the *four* service area of the *five* schools under review:

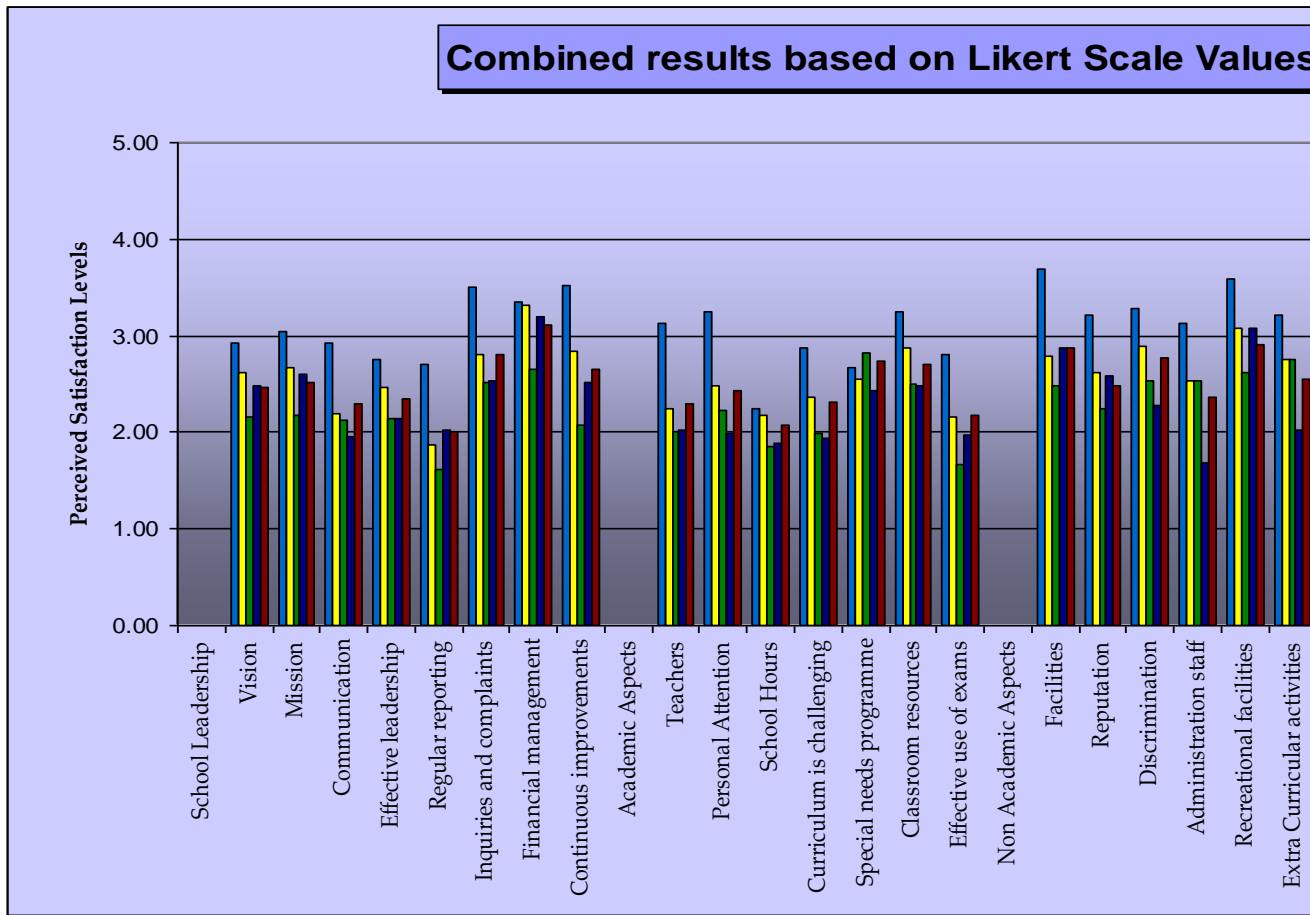


Figure 8: Results per school for each of the four service areas

3.5 Factors that influenced the choice of school

The last part of Section A of the Questionnaire required respondents to rank the factors that influenced their choice of school when the initial decision of school was made.

The principal and most important factor in the decision process appeared to be the *curriculum* offered by the school. This could be explained by the fact that the majority of students in the schools are expatriate students. As a consequence of the transient nature of students' time in the country, parents look for an internationally recognised curriculum. Expatriates are aware that children might have to return to their home country before the end of their schooling and will then have to resume the curriculum presented in their home countries.

The *reputation* of the school was ranked second most important and the quality of *teaching staff* was ranked third; followed by *facilities, location, fees* and *extra curricular activities*. What was interesting to note was that school fees did not play a decisive role in the choice of school; this is quite surprising and could reflect on the financial sacrifice that parents are willing to make in exchange for quality schooling, or that the fees are paid by the parents' employers.

In general, respondents found the ranking question to be difficult to answer. Respondents were required to list *seven* items that influenced their initial choice of school into order of importance. Some respondents did not complete this question and others had difficulty with the interpretation and listing of *seven* items. In future studies the author proposes to amend the choices to *five* and allow respondents to indicate other factors that influenced their choice of school. This will allow for more open ended responses within the instrument itself and allow

respondents to comment upon less directed and focused areas of concern.

3.6 Correlation between parent and student responses

Correlation between parent and student responses was established to be significant at the 0.01 level. The Pearson correlation indicated a .870 coefficient, where $n=26$, and the results were significant at 0.00.

In *Figure 3* below, the scatter graph of correlations between parents and student responses are illustrated.

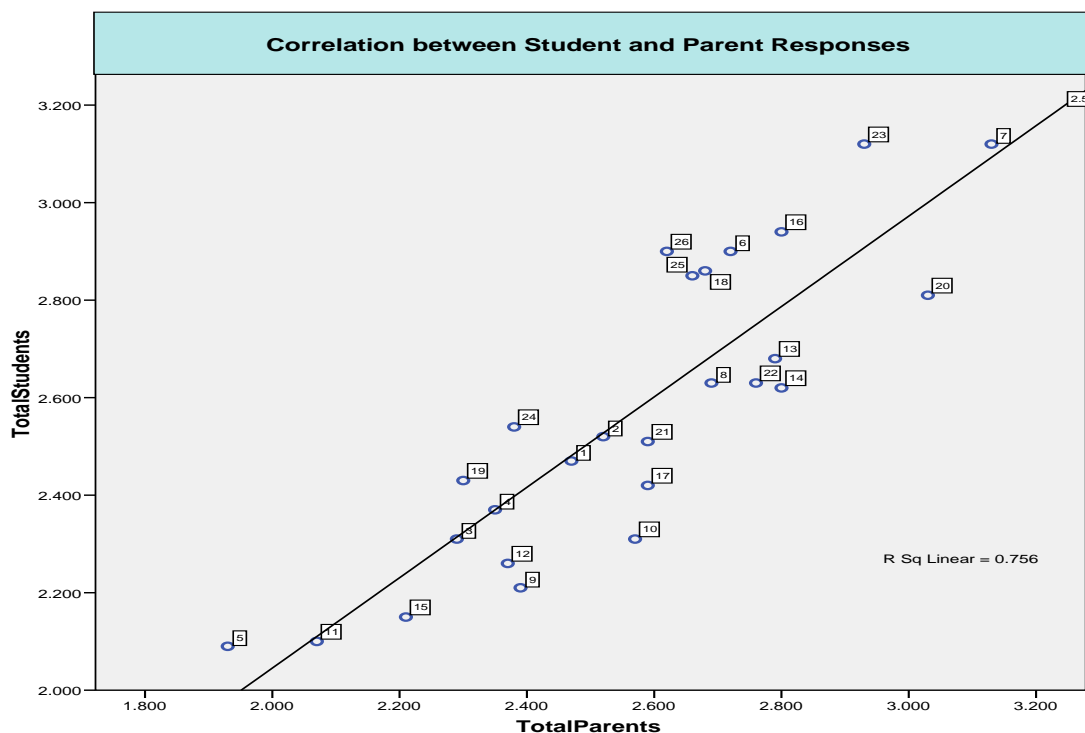


Figure 9: Correlation between parent and student responses

The separate data for students and parents in *Figure 9* indicate a significant correlation of student and parent responses that indicate the favourable comparison of the perceptions of both groups. It is obvious

that the discernment of parents and students indicate a degree of congruity in the shape of the curve, with small differences in very few areas. In *nine* of the *twenty six* factors under consideration the perceptions of parents and students were equal or a difference of less than 0.05 was noted.

Students feel stronger about the food services offered by the schools and would prefer to include healthy food options. The cafeteria food currently being offered at the schools under review is generally not prepared on site and as a result consist of sandwiches and other easily transportable foods. The food service is outsourced in most schools and this problem will only be solved if school management take an active role in the selection of food items.

In general, students are more concerned with the quality of support services than their parents and they have voiced their concern over the quality and availability of counselling services, bus services and parental involvement. It was interesting to find that students are more concerned with the level of parental involvement than their parents. In most cases parents don't play an active role in the school and prefer to shift these responsibilities onto teachers and school managers. The fact that students are aware of this lack of involvement places a question mark over current levels of parental involvement in secondary schools. Schools in turn need to create opportunities for parents to be more involved in the day to day activities of the students.

Parents, in return, have expressed greater apprehension over the quality of the teaching staff, amount of personal attention provided to each student, available resources and the reputation of the school. It is clear that parents concentrate more on the academic aspect of the service delivery, although surprisingly, parents are disappointed by the low

level provision of extra curricular activities. The fact that parents are fee paying customers raises their perception that 'extra' benefits should be provided to add value to the quality of services delivered. Student life is central to any secondary school and parents want the school to provide students with activities to involve them in sport, culture, community service, art and other worthwhile tasks.

What does become apparent in *Figure 10* below is the obvious correlation between the perceptions of students and parents. The author believes that this could indicate a measure of communication between parent and student at home. Values are also instilled in children from a young age and parents seem to transfer their perceptions of quality to their children.

The biggest difference (0.27) in opinion was noted in the area of parental involvement, where students perceive the involvement of their parents to be an area of possible improvement. Parents on the other hand did not see this as a problem area and were, in general, satisfied with their involvement levels. Students were also more concerned with the quality of the bus services offered by the schools. This could be as a result of parents not being involved in this area of service delivery and therefore not experiencing the service first hand. Parents were concerned with the amount of personal attention being paid to each student; however this was not an area of concern for students. Parents do, however, find the provision of recreational facilities lacking and students perceive these facilities as adequate.

*Please note that all charts with **lower** totals (shown by lower bars) indicate areas of better performance and charts with **higher** totals (shown by higher bars) indicate areas of concern or dissatisfaction. This is a direct result of the Likert*

Scale that was applied to the EdPERF instrument, that measures 1 as strongly agree to 5 as strongly disagree.

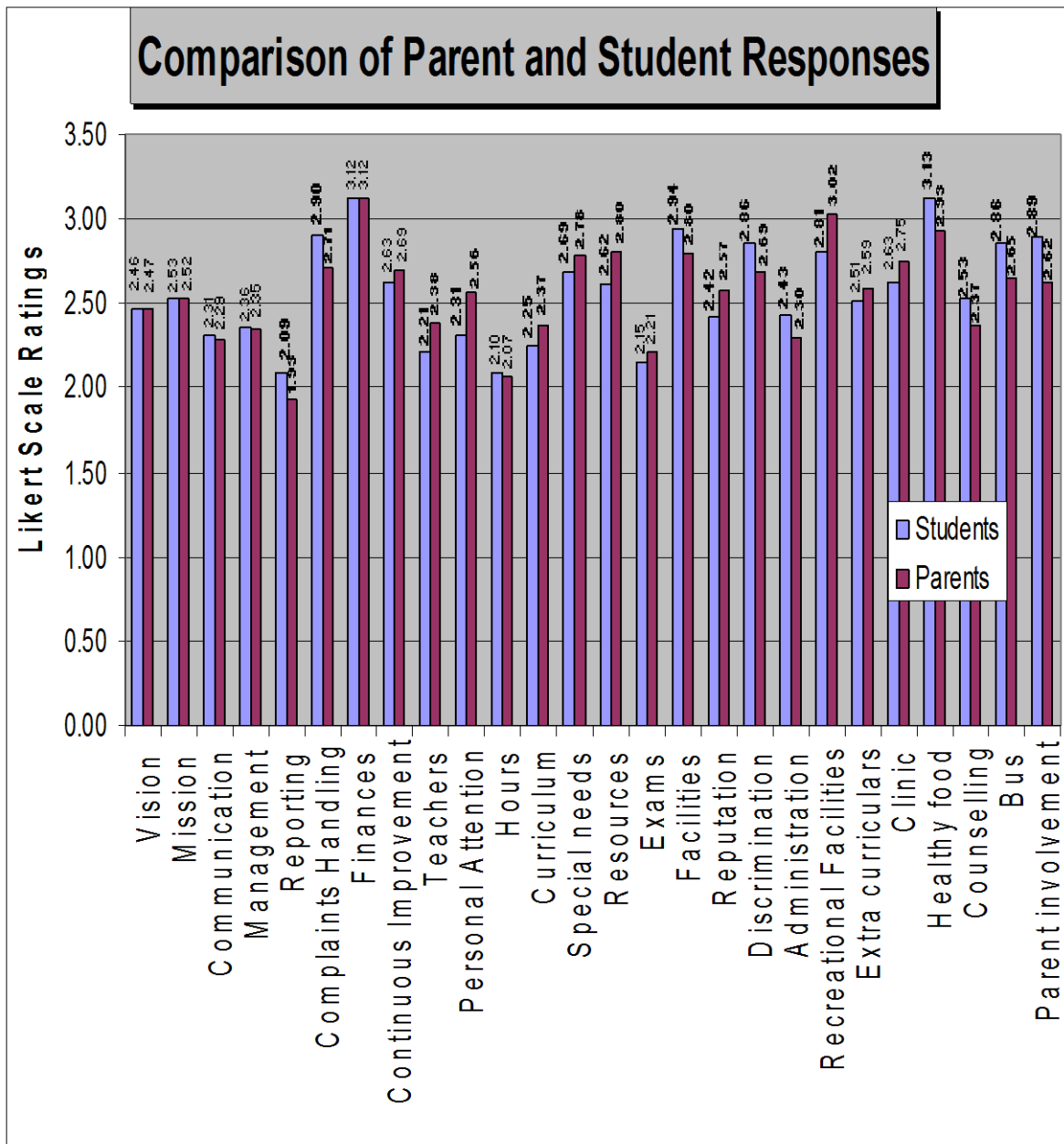


Figure 10: Comparison of Parent and Student Responses

Parents and students agreed on more than 30% of the factors evaluated in the questionnaire. It is worth noting the agreement on the management of finances as an area of dissatisfaction. This is interesting, considering that the fees of schools was listed as low as number six in the initial factors listing choice of school. Quite a number of disagreements

were noted in the 'support services' category. Parental involvement, as discussed previously, was an area of disagreement, so too were bus services, healthy food options and the provision of extra curricular activities.

3.7 Identification of perceived areas of satisfaction and dissatisfaction

The total results of parent and student responses in *Figure 11* below allow for an overview of the total performance of the *five* schools in the various service areas. The total responses for each question were calculated to represent mean values in order to make comparisons possible. The mean values were then reduced to the original five-point Likert Scale ratings for ease of reporting.

In *Figure 11* it becomes apparent that respondents are generally satisfied with the leadership of schools. The exception to this is the handling of queries and complaints as well as the management of finances. The financial management of the schools is a great concern to both students and parents. Both groups have commented that some schools have recently increased fees by up to 20% with no direct benefit to the students. Improvements to the facilities and the services offered by the schools were expected from the increase in fees; however, this has not been the experience of parents and students. Further areas of dissatisfaction include the availability of special needs programmes in schools, the lack of classroom resources, discrimination between students by teachers and staff members, provision for adequate recreational facilities and most of the support services. The dissatisfaction of students and parents with the lack of healthy food options has already been discussed.

Please note that the higher scores indicate areas of *dissatisfaction* and the lower scores indicate areas of customer *satisfaction*

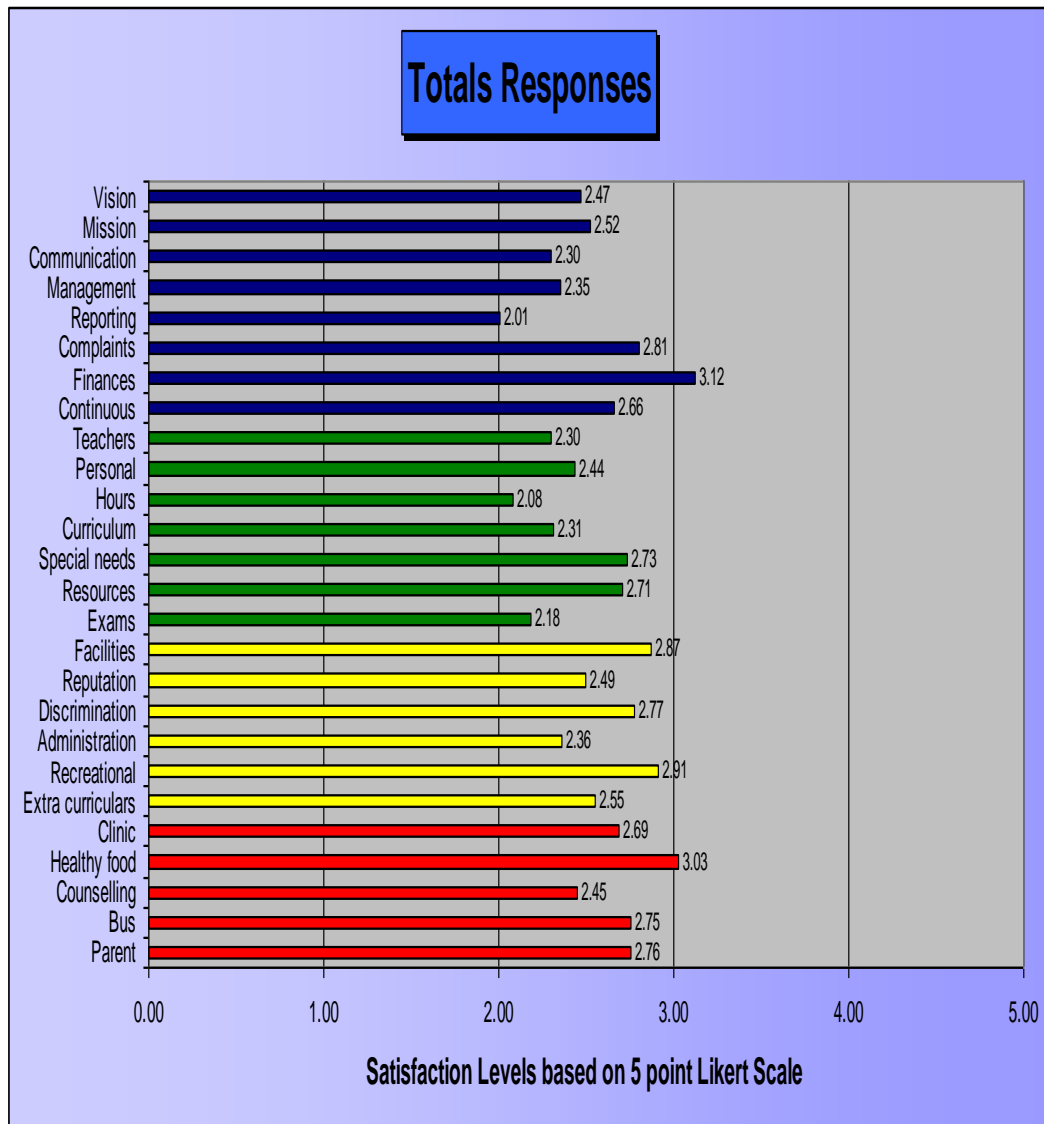


Figure 11: Total of parent and student responses (including all schools)

Customers are satisfied with the reporting of results by schools, the teaching staff employed, sufficient school hours and effective use of tests and exams. Administration staff is perceived to be friendly and approachable and in general respondents are satisfied with the counselling service provided at schools. The average time that respondents have been involved with the school (six to eight years)

further suggest that they are loyal to the school and must be satisfied with the quality of the service provided.

3.8 Effectiveness of the EdPERF instrument

Given that the questionnaire had been appropriately designed through a comprehensive review of literature and then further refined based on the frequency of the use of the respective factors by international accreditation organizations, the face value of the instrument was ensured (Bohrnstedt, 1983; Kaplan and Sacuzzo, 1993) The results clearly indicate areas in which respondents perceived service delivery to be lacking in quality. EdPERF appears to be effective in identifying the areas of perceived dissatisfaction and could be used to assist in the planning of future improvements at schools. This information would be valuable in the estimation of a budget to facilitate the finances needed for these improvements. The EdPERF instrument has been used to produce reports to Principals identifying the correlation of perceptions between students and parents as well as the areas of improvement required by both these groups. The information generated from the questionnaire has been found to be useful in the planning of future improvements and in the quality assurance processes followed by these schools.

Having comparative results of *five* schools allow for the benchmarking of service quality against other schools in the region. With repeated application of the instrument and collection of more results, it would become possible to assist parents in choosing a suitable school based on their requirements and criteria. Ideally this data could be made available on the World Wide Web for expatriates/parents to use before even entering the Emirates. Supplementary guidance could also be provided as to the fee structure of schools in the seven Emirates, entry requirements and age groups, documentation required by the Ministry of Education and personal consultation, if requested. This service does

not currently exist and could become a valued service if the growth in the expatriate community continues with its current trend.

The author proposes that the EdPERF instrument can be used in a variety of different ways, and that the data generated will be invaluable for the improvement of service quality in private schools in general. It could be used further to study trends, visions, and goals by determining the perceptions of primary customers and in future it could be expanded to include related views of teachers, administration staff and school managers.

3.9 Feedback from school principals

The Principal of school A confirmed that the results provided them with '*food for thought*' and that many of the points were justified. She was concerned however that the report reflected a negative image of the school and she would have liked to have seen a more positive picture. She listed the areas of improvement that were identified within this study and emphasised that each of these areas were now receiving attention and that with a more recent study, the perceptions of parents have been more positive.

At school B the Principal commented that the results reflected by the study were '*broadly in line*' with recent results obtained from an in-house survey. The Principal commented that the issues raised were currently being improved and raised the issue that service quality would remain a perception of individuals, all of which could never be completely satisfied.

School C's Principal remarked that the results have '*hit the spots*' and that they are currently attending to all the issues that were identified as areas of dissatisfaction. The school uses its own in-house surveys once a term

and found very much the same results in a survey carried out last term. He agreed on all the findings and added that he has benefited from the report in various ways.

During the interview with the Principal of school D he stated that he was *not surprised by the findings*. The school also makes use of regular surveys that have led to similar results. He particularly liked the inclusion of students in this survey, as most in-house surveys used by the school only take into account the perceptions of the parents and teachers.

The management of school E found the results to be intriguing and a wonderful opportunity to obtain the views of an external party. However, management did not agree with all the perceptions and were particularly concerned that the sample size did not represent the whole school population. They have extended an invitation for another study to be done on a larger population of parents and students.

In all schools Principals were concerned with the use of the phrase '*financial management*'. They felt that the term was too broad and that this question needed to be more specific. As responses from the parents and students in all *five* schools indicated that this was their main concern, the Principals have commented that this could be interpreted in a number of different ways. In practice this function is handled by the management company and school Principals have very little influence in this area of service delivery.

It is also worth noting that during the time of survey administration in schools, the particular management company was receiving considerable media attention in local newspapers for wanting to increase school fees by up to seventy percent, for the forthcoming academic year. This issue has since been resolved and the perceptions of both parents and students could well be quite different at this point in time.

CHAPTER 4

SUMMARY

“Education is one of the few things a person is willing to pay for and not get”

William Lowe Bryan

4.1 Overall Conclusions

The ability to build a value chain through the creation of a total education delivery process, based on a commitment to customer satisfaction and service quality, should go a long way to ensuring the continuous improvement of education services.

The identification of specific areas in which parents and students are dissatisfied implies that schools *do* need to respond to client perception. Whether or not a given school has the capability, capacity, finance or the will to improve the quality of services delivered is a separate issue beyond the scope of this study.

The distinguishing feature of this instrument and its application resides in the fact that it attempted not only to solicit perceptions on academic performance, as had been the case so often in past research instruments, but extended to embrace non-academic aspects of education, school management and support services. The need for such an instrument has become vital in the *milieu* of the increasingly competitive market of private education in the UAE. This has become an important quality issue not only for private education in the UAE specifically, but also globally.

The EdPERF instrument has been applied here in the private school sector in the UAE and appeared to have been sufficiently discriminatory in defining areas of customer satisfaction and dissatisfaction to guide school management in directions for future improvement plans.

4.2 Limitations

There has been a considerable amount of research into the characteristics of 'successful' schools – schools that are perceived to deliver exceptional service quality. However, it remains to be debated whether these characteristics are representative of all 'successful' schools and indeed whether or not they are true indicators of quality. That will always be decided finally by the customers themselves – the students and their parents.

The influence of culture and context specific conditions on perceptions of "quality" and of "service provision" has clearly been a factor which has greatly influenced the responses to the research study of perceptions in the schools under consideration in this research.

In the UAE this is a significant fact to bear in mind as the population demographics demonstrate that the customer base is made up of a variety of different nationalities, religious beliefs and cultural backgrounds, all of which precondition consumer expectation. The development of an instrument to measure customer satisfaction in such schools therefore needs to be culturally sensitive to the specific requirements of the country in which it is applied if it wishes to have increased face validity.

Consequently, the author is of the opinion that it is essential that any generic instrument used to inform on the quality of school service provision needs to be adjusted for use according to the prevailing culture of the host country.

In terms of limitations imposed in this study, the first aspect of concern which is an overarching limitation in any study such as this which is effectively testing out a newly designed instrument or protocol, is the lack of any relevant comparison. There is no other comparable instrument known to the author which sets out to examine systematically 26 deliverables over a range of services as are typically found in international schools, although it is acknowledged that many schools must, over the years, have developed in-house protocols to assess customer satisfaction.

Secondly, the study was carried out at one point in time for each school rendering the validity of conclusions based upon the results somewhat questionable. At meetings held with the Principals of the five schools following publication of the reports it was confirmed by them that, in the great majority of cases, the extent to which the findings of the questionnaires found congruency with the perceptions of the Principals for their own schools was high.

One area in particular highlighted the need for a repeat study to be carried out in each school at a later stage before confirming the degree of significance of the findings, concerned finance. All five studies indicated a measure of concern regarding the management of finances by the schools. As the study was carried out during a week when the schools were attempting to raise fees for the coming academic year by seventy percent it was not surprising that many students and parents commented on the fact the “management of finances” was a cause for

concern. At any other time of the year, the response may have been significantly different.

Therefore, in this review no conclusions should be drawn regarding the causality between student and parent perceptions in general.

For future research the Likert Scale values will be reversed to indicate 1 as 'Strongly Disagree' and 5 as 'Strongly Agree'. This will allow for easier reporting of tables and graphs as peaks would indicate areas of satisfactions.

4.3 Future Research

It is recommended that future research should revisit, re-examine and revise, if necessary, the *twenty six* indicators used in the EdPERF instrument. Performance indicators have long been criticized as being vulnerable to wider social, economic and cultural influences (Willms & Raudenbush, 1989). Therefore, the author, in adapting the instrument to the local culture and environment, hoped to overcome many of the difficulties in perception which may have arisen from cultural and social differences within the sample population. The author urges others to do the same, when applying this instrument.

The author wishes to encourage others to join in the search for an instrument to measure the perceptions of service quality by secondary school parents and students in a private school environment. It may be worthwhile to compare different perspectives by including government agencies and authorities, teachers and the general public in further surveys of this kind. Whilst this study has concentrated on the views of parents and students only, the author recognises that education has

other customer groups and stakeholders who require to be satisfied with the quality of educational provision to the same extent.

It is not the author's intention to claim that this is the ideal instrument, but simply to pave the way into the development of a generic instrument that can be applied to measure customer satisfaction in the private school environment, thereby hopefully leading to appropriate improvements in the provision of quality service by schools to students and parents as, where, and when required.

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