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What Matters Most? Measuring Service Quality to Improve Schools

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WHAT MATTERS MOST?

MEASURING SERVICE QUALITY TO IMPROVE SCHOOLS

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Abstract

Over the recent years an observable trend has emerged in the field of
education. Parents are empowered and encouraged to make school choice
decisions for their children and have become consumers of the educational
delivery system. They are inundated information regarding the "product" of the
school - student achievement scores and overall performance rankings. Do parents
value other things beyond academic performance rankings and student
achievement ratings? How do parents perceive the importance of the quality of
the delivery of educational services? In a competitive educational marketplace,
attracting and retaining families is essential to a school's ability to survive and
succeed.

This mixed-method study draws from research on customer service from
the business field. It was designed to learn more about parental perceptions of the
service quality dimensions: Reliability, Assurance, Tangibles, Empathy, and
Responsiveness (Parasuraman, Zeithaml, and Barry, 1985).   In schools, these
dimensions correspond to issues of school safety, culture and climate of the
learning environment, communication and parental involvement. Parents from
four elementary schools in a large urban school district participated in this study
by completing a survey designed to solicit information about parental perceptions

of the importance and performance of these service quality dimensions in relation to their experiences with their child's school. Interviews with the school principals before and after survey administration identified their current practices and perceptions regarding parental feedback and evaluated their school's survey results as a tool to identify areas for school improvement.

The findings of this study indicate that parents of all socioeconomic levels and ethnicities consider Assurance (the knowledge and courtesy of employees and their ability to inspire trust and confidence) and Empathy (the school's ability to provide caring and individualized attention) as being more important to them than school performance indicators specifically related to student achievement. In most instances, parents' ratings of the importance of a service quality indicator were higher than their ratings of their school's performance on that indicator. These findings suggest that school leaders should balance their efforts toward improving student achievement with efforts toward improving customer service.

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Chapter 1

Introduction

The Parent Perspective of Choice

In a quiet neighborhood, not far from the downtown core of a large

American city, sits an elementary school. On a brisk November morning, a small

group of parents stands on the sidewalk looking back at the front doors of the

school, deeply engaged in a conversation about what they had just experienced.

They met this summer at a nearby community pool and became fast

friends when they realized that not only did they have children of similar ages, but

also that they were all engaged in the process of choosing new schools for their

children. Sally was the parent of a soon to be kindergarten student. She wanted to

find a school that would academically challenge her daughter and where she

herself could contribute by volunteering at the school on a frequent basis. She

wanted to be involved with her child's education while simultaneously helping to

make a difference for other children and the school itself. She hoped that all of her

children would eventually attend the school she chose for her first child.

Allison disappointed and upset by the experience she had had at her

children's previous school wanted to find a place where her children would be

safe and thrive. She was concerned because she anticipated that this move would

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be difficult for her children because they would be leaving friends behind at their current school. She was also frustrated that she had to go through this process again because the problems she experienced at the other school never should have occurred. She had expected more from the school's leadership and was not willing to sacrifice her children's education or safety because of the school's constant lack of response. Knowing that she couldn't be involved on a daily basis, Allison would have to trust that the school was meeting her children's needs based on the research she was doing now and on her daily interactions when she would drop off and pick up her children. She was most interested in learning about parent satisfaction levels at any of the schools she would consider.

Michael was new to the community and was looking for a place where his children would receive an education that supported his family's values and where parents would have an opportunity to become a part of the school community as well. After a recent job transfer, he knew few people in the city and was hopeful that not only would his kids make new friends, so would he.

Three families all engaged in the school choice process for different reasons. Did they share common criteria when it came to what they wanted from a school? Only time and experience would tell.

Sally, Allison and Michael decided to go through the process together. This way they could compare thoughts and experiences and bounce ideas off of each other. Since Sally had been preparing to make this choice for quite some

time, she had spoken with many people and learned which schools were most popular amongst parents. Allison had already done a lot of on-line research reviewing the state issued school accountability reports, parent satisfaction survey results, district performance indicators and student achievement data. Finally, Michael felt that it was important to get a "feel" for the school. He wanted to see how he was treated when he visited different schools and what other parents had to say. They decided to collect this information to get the process started and make a short list of schools they were interested in considering. They also wanted to focus their search on one geographic area of the city but agreed that if they found a school that was outside of that area, they would consider it.

Together, they created a preliminary list of schools to consider. Sally was going to run the list by a couple of friends – some of whom were teachers and others who were parents of students currently enrolled in the district. Allison would print off the state report card for each of the schools and any other relevant data she could locate. Michael would do an unannounced drop-in visit at each school to see how welcoming the school was. They would meet again in a week at a nearby coffee shop to narrow the list down to a short list of 3-4 schools.

A week later, Michael came storming into the coffee shop. He was clearly upset and couldn't wait to share his experience with Allison and Sally. "I stood in that office, waiting for someone to acknowledge my presence for six minutes! And when the secretary finally decided it was my turn, she treated me as if I were

the biggest inconvenience of her entire day – and it's only 9:30 in the morning! I never want to set foot in that place again. It was dirty and dingy, no one was smiling and I could hear someone yelling at a child down the hall. I passed four people on my way to the office – which was not clearly marked - and not a single person said hello or offered assistance. My kids will not be going to that school, no matter what!"

"Wow!" said Allison. "I'm shocked. Based on the state's School Accountability Report, they've got decent scores and there doesn't seem to be a high level of teacher turnover or safety issues. The results from the most recent parent satisfaction survey seem to indicate that parents are pleased with what's happening at the school. I wonder what's going on. This school is really close to our home and I was actually hoping it would be one of the final candidates."

"You can put it on your short list, but don't add it to mine!" sneered Michael. Sally said she had heard mixed reviews about this school and suggested that perhaps they put it in the "maybe" column for now.

They continued to share their findings about the other schools on the preliminary list. One had high student achievement scores, was fairly close to their neighborhoods and had a high level of parent involvement and satisfaction, as well as a very pleasing atmosphere. Unfortunately, however, the school would accept very few choice applicants due to the high enrollment of neighborhood children. There would be a lottery for the limited spaces available. Perhaps the

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school would accept only some of their children. What would happen if one sibling got in and another didn't? They decided it was still worth looking into and chose to add this school to their short list.

Another school met all of their criteria but was a considerable distance from their neighborhoods. It would involve car-pooling or a lengthy bus ride for the children at the beginning and end of each day. The student achievement data was outstanding, parents were very positive about their experiences and the school had a clean friendly atmosphere. Since it was a magnet school for the district, they couldn't be sure that all of their children would qualify to attend this school. Nonetheless, they wanted to keep it on the short list because it was such a popular school in the district.

The third school they discussed had originally been very low on their list. In fact, Allison had discounted it completely after she reviewed the reports on-line. Student achievement was lackluster and the school had a bad reputation as being unsafe in the past. Sally, however, had been hearing tremendous things about this school. It seemed that every time she asked people about schools these days, this school came up. Michael had stopped by the school on his way home from an appointment one day and was impressed by how friendly people had been. The principal even stopped by to greet him and invited him back for a school tour. The office staff was very pleasant and helpful and the teachers seemed to be happy. He liked how the school had a clean, bright and inviting

atmosphere, and he hadn't even made it into a classroom. Allison, however, was skeptical because the data wasn't favorable, but she agreed to keep an open mind.

There was another school that was very intriguing to Sally, Allison and Michael. The school's special international program was highly regarded, but the school was quite a distance from their homes. The data was promising, it had a brand new playground and a recently added extension, but little parent information was available. Michael had made a visit to the school and left disappointed by his experience. They hadn't provided him with written materials, so it was hard to remember all of the program components. On his way home he decided that he was not willing to make that kind of drive everyday for something that didn't seem to be that extraordinary. Allison and Sally concurred.

The last school they discussed was close to their homes, had average scores and was well respected throughout the community. Sally knew some of the parents at this school and reported that they were all having a good experience. It was safe and clean and Michael's drop by visit had been fine but not exceptional. Thankfully the school website provided some more detailed information about the program and special offerings at the school. They agreed this school was still worth considering.

Quickly their list had been reduced from eight schools to three before they had even taken tours of the individual schools. This would be their next step. And what would they find?

After engaging in a rigorous school choice process, Sally, Allison and Michael agreed that there is far more to the selection of a school than simple facts and figures. First impressions, the overall environment, parent opinion and day-to-day experience all had an impact on their decisions. Some things outweighed others and it had become clear that the quality of the overall experience was more significant than any single component. They had also learned that some of these subjective factors had a more significant impact on their decisions than any of the school performance data or accountability reports. This was something they had not anticipated.

This vignette surfaced some of the issues faced by parents as they engage in the school choice process. Schneider, Teske and Marschall (2000) indicate that the reports and written documentation provided by schools, districts and states, often contain detailed, objective data related to student achievement, teacher qualifications, discipline and safety records, parent satisfaction and a variety of other measurable indicators. But as anyone who has set foot in a school realizes, schools are complex organizations with elements not easily captured or represented numerically in a report. Parents may rely on the school's climate and culture to define "school quality." The subjective nature of these components means that they must be experienced first-hand to accurately assess if the environment meets one's expectations. Additionally, the complexity of

information provided to parents by schools and districts may hinder parents from using the information for its intended purpose – to make informed choices.

In 2000, Schneider, Teske and Marschall (2000) conducted a comprehensive study in four distinct districts in New York City and the suburbs of New Jersey where the researchers analyzed what parents value most in schools, how they gather information, how they measure satisfaction, and how their levels of involvement with the school are affected by their choice status (Schneider et al., 2000). Through a phone interview, 1,600 parents were asked to hypothetically identify which four quality attributes from a list of eleven were most important to them. This study's results indicated that parents consistently identified academic aspects such as teacher quality and high test scores as being most important followed by safety and values (Schneider et al. 2000, p.94).

Research conducted by Teske, Fitzpatrick and Kaplan (2007) indicated that parents who are engaged in the school choice process gather a tremendous amount of information. This information comes in the form of printed materials, Internet resources, school visits and conversations with other parents, teachers and administrators (Teske et al., 2007, p. 39). But what factors most heavily influence parents as they make these decisions? How do parents define quality? When parents speak to others about a school, what information do they discuss? Once parents select a school, how do they define and measure satisfaction? Do they focus on what Teske refers to as the "hard data" (i.e. student achievement reports

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and school performance ratings) or is it more related to the "soft" facts (i.e. school culture, safety and leadership) that describe the qualities and day-to-day life at a school (Teske et al., 2007, p.4)? Furthermore, do parents who report having high levels of satisfaction at their child's school have different quality experiences? Is there a difference in the perceived level of quality provided at various schools?

If one accepts that parents may rely upon subjective data to make school choice decisions, then one would consider whether school administrators and teachers, driven by extensive reform efforts and feeling extreme pressure to raise student achievement, may actually place too much emphasis on criteria that may not always be the most important factor to parents as they make school choice decisions.

In a study conducted at Pepperdine University, Cohen and Wunder (2007) investigated how parents evaluate school quality and the factors that influence their school choice decisions. They also considered if the data included on the state issued school report card was in alignment with the information parents consider most important when making school choice decisions (Cohen & Wunder, 2007). The study examined the following service quality dimensions as defined by Zeithaml and Parasuraman (2004, p.4).

1. Assurance – knowledge and courtesy of employees and their ability to inspire trust and confidence;

2. Empathy – Caring, individualized attention provided to customers;

3. Reliability – ability to perform the promised service dependably and accurately;

4. Responsiveness – willingness to help customers and provide prompt service;

5. Tangibles – appearance of physical facilities, equipment, personnel, and communication materials.

The study results indicated that the service quality dimensions are as important to parents when making school choice decisions as the "hard data" and that the cost of poor service quality is decreasing enrollment (Cohen & Wunder, 2007, p. 186).

The following study would provide school principals with information about parental perceptions of service quality in hopes of obtaining a better understanding of school quality and parent satisfaction. With this information, school leaders would potentially be in a better position to increase enrollment and reform schools by establishing closer alignment between the services that parents respond to positively and what schools provide.

Statement of Problem

Over the recent years, an observable trend has emerged in the field of education. Parents armed with a wealth of information regarding school quality, student achievement, school satisfaction and overall performance are empowered and encouraged to make school choice decisions for their children. Parents often

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consider a wide variety of information combined with personal experience to evaluate the quality of a school. This information then translates into a decision about which school they would like their child to attend. But how do parents define "school quality," and what things guide their satisfaction ratings and school choice decisions? Furthermore, do the service quality factors parents identify as being most valued match the services provided by the schools their children attend?

If what parents' desire in terms of school quality is not in alignment with what schools provide, then it stands to reason that parents may consider making different choices. In a highly competitive educational marketplace, where parents have a plethora of educational options from which to choose, schools can no longer afford to disregard parents' definitions of quality, their levels of school satisfaction or their expectations for performance. If they do, parents may choose to go elsewhere and a school's enrollment will eventually decrease resulting in lower funding and program reductions.

Current educational reform efforts have focused on the need to improve instructional programs in hopes of increasing student achievement and graduation rates. However ignoring other quality indicators such as school safety, culture and climate of the learning environment, communication, and parental involvement may perpetuate the weak performance of many schools or contribute to their demise.

If school administrators fail to accurately identify and understand the indicators parents consider to be most important when they define quality and satisfaction, then they may overlook the need to attend to areas that if improved, could lead to higher levels of parent satisfaction. Therefore, the purpose of this study was to learn more about service quality as it pertains to education. By developing a tool to solicit information from parents about the importance of service quality dimensions in relation to their experiences with a school, principals would receive feedback to help them identify areas for school improvement. The ultimate goal was to determine what service quality dimensions matter most to parents, compare how the parents' assigned levels of priority for the various service quality indicators aligned with a school's level of performance, and finally, to provide a format for sharing this information with principals and district administrators in a manner that could be easily interpreted.

Research Questions

1. Are service-quality dimensions important to parents? Is there a statistically significant difference between the importance and performance ratings of the service quality dimensions identified by parents as being important and do these ratings vary by school or demographic variable category (i.e. ethnicity, socio-economic status)?

2. Is there a relationship between the level of importance assigned by parents to the service quality dimensions and the perceived levels of performance at each of the schools in the study?

3. What are principals' perceptions of the usefulness of this survey's results in guiding school improvement efforts?

Statement of Significance to the Field

Over the past fifteen years, there has been a decrease in the percentage of students who attend their assigned public school. The US Department of Education's National Center for Education Statistics (2006) reports that between 1993 and 2003 the number of students attending a public school of their choice increased from 11% to 15% while the number of students attending their assigned school dropped from 80% to 74%. With the formalization of choice processes in districts across the country as mandated by the No Child Left Behind Act, the percentage of parents exercising their right to choose a school other than their assigned school continues to grow.

Of further interest is the fact that the percentage of parents who report being very satisfied with their child's school varies by choice status. In another report issued by the US Department of Education (2006), the percentage of parents in 2003 whose children attended an assigned public school reported an overall satisfaction rate of 53.7% while parents of students attending a chosen

public school or a private school had satisfaction rates of 64.2% and 75.8% respectively (US Department of Education, 2005).

With school choice percentages on the rise and parent satisfaction rates that correlate with these choices, one must wonder if schools fully understand what drives parents to make other choices. A study conducted by Zeithaml, Parasuraman and Berry (1992) indicated that if firms (i.e. schools) don't know what their customers (i.e. parents and students) desire in terms of service, then how can they offer programs that match their customers' expectations?

Thousands of parent satisfaction surveys are collected in schools across the country every year. But who determines what will be measured by such surveys and can it be assumed that what a district or school sets out to measure is actually important to parents? Administrations of annual surveys to parents attempt to quantify the level of parent satisfaction for a specific school year. As such, the survey results provide a source of summative data related to past performance. What is often lacking on these surveys is an importance rating. When principals and administrators review the data, they have no way to determine if the questions are actually important to the parents. Even if schools use the results from such surveys to define improvement plans, there is no guarantee that what they actually focus on is what matters most to parents.

Three prevailing questions then remain: (a) Do schools know what is important to parents by simply conducting parent satisfaction surveys; (b) can

satisfaction surveys be revised to better reflect what is important to parents while simultaneously evaluating school performance; and (c) can school officials make better use of satisfaction survey data to guide overall improvement efforts?

This study offers significance to the field of education by examining the above noted questions through the exploration and application of concepts from the business and marketing fields. It was anticipated that the development of a survey tool designed to examine parent values and school performance in relation to the five service quality dimensions and the presentation of survey data in a format borrowed from the field of marketing would provide school administrators with information about parent satisfaction and service quality in a way that would help inform school improvement plans.

Given the shifting enrollment and school choice trends and the influence of school choice and parent satisfaction (US Department of Education, 2006) on enrollment patterns, it is critical that school administrators and district personnel develop a deeper understanding of the qualities that parents use to rate school quality and measure school satisfaction. The identification of these factors that influence parental perceptions can assist schools as they strive to improve upon their performance.

Purpose of the Study

For this study, the researcher purposefully selected four urban elementary schools in the city of Denver to administer a parent survey designed to assess

parental perceptions of the importance and performance of a variety of service quality indicators in relation to their child's school. At the time of this study, Denver Public Schools (DPS) was in the third year of an extensive reform effort. The Denver Plan (2006) focused on "increasing student achievement and providing a safe, orderly and enriching learning environment where all students would be provided with the high-quality instruction and support necessary to eventually graduate from high school." DPS had experienced a shift in enrollment over the past decade increasing from 70,847 students in the fall of 2000 to 75,269 students in the fall of 2008. However, even with this increase in enrollment, during the 2007-2008 school year, eight schools in various areas of the city closed due to a multitude of factors, some of which included declining school enrollment and low student achievement. In light of the school closures, district administration understood that there was a need to create high-performing schools to better meet the needs and expectations of students, parents, and the community.

Additionally, DPS offered a variety of intra-district school choice options including, neighborhood, magnet, and charter schools. In April, 2007, a report commissioned by the DPS Board of Education stated that at least 30% of students in DPS were attending a school of choice – a rate nearly twice the national average according to a school choice survey conducted by the National Center for

Education Statistics (Tice et al, 2006). Three of the key findings included in the district report indicated that:

1. Parents behave like consumers regardless of socio-economic status, ethnicity, or grade level and exercise their choice options.

2. Principals lack access to reports that would allow them to better understand choice trends and define school improvement plans.

3. While school leaders accept school choice as being a reality, they often lack the information, capacity and skills required to effectively market their schools.

Finally, the state and district's collection and analysis of school-based data had intensified over the past five years. In an effort to provide a more detailed examination of student growth and achievement, DPS introduced the School Performance Framework (SPF) in the spring of 2008. The SPF is a comprehensive tool designed to evaluate school performance in relation to individual student achievement and overall organizational strength using a variety measures. The SPF determined a school's accreditation rating for reporting purposes to the Colorado Department of Education, as well as provided information for teacher and principal compensation systems. Additionally, the district presented the SPF to parents and the community as yet another tool to help assess the quality of a school. As such, it became a source of data that may influence parents' as they make school choice decisions.

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At the time of this study, the SPF was comprised of six categories: Student Progress Over Time (as determined by yearly rates of academic growth), Student Achievement Level (school status as determined by academic achievement and school ratings on state reports for the past two years), College and Career Readiness (secondary schools only), Student Engagement, School Demand, and Parent and Community Engagement. There are different measures for each category and schools receive a rating of *Exceeds, Meets, Approaching*, or *Does Not Meet* based on the results of these measures for each category.

The Student Progress and Student Achievement categories focused primarily on instruction and performance. ACT scores and graduation rates determined ratings for the College Readiness category for students attending a specific school. The Student Engagement category was measured by the school's annual average daily attendance percentage and data from the student satisfaction survey, and School Demand was measured by the school's student enrollment rate and enrollment change over time. The SPF Scorecard is a summary of the overall results for the SPF. The Scorecard for each of the schools participating in this study is contained in Appendix F.

Parent and Community Engagement was a newly added category for the 2008-2009 school year. As the district positioned itself to add this category to the SPF, the researcher learned that this study would help inform the development of this section of the SPF. The results of the Parent and Community Engagement

category will be released in the fall of 2009 and will reflect the response rates and data retrieved from parents at every district school on the newly designed parent satisfaction survey administered in the spring of 2009. The survey created by the researcher for this study served as the foundation for the district's new survey and shifted from questions phrased in terms of how parents "felt" about various things to more measurable and specific statements.

The addition of the Parent and Community Engagement section as a measure of school performance was an area of concern for many school principals as the surveys were created externally without much input from the schools. Principals did not fully understand or agree with the content or administration of the survey and were apprehensive about its use as a tool to assess their schools. In this district, school performance has an impact on the compensation of principals and teachers and the addition of parent satisfaction to the performance criteria focused on student achievement created concern.

Chapter 2

Review of Related Literature

Educational reform is a source of great national debate. As Frederick Hess (2005) points out, "education has been plagued by a surfeit of innovation" (p. 1). Those seeking to bring about transformative change have prescribed everything from the complete redesign of schools, to the implementation of research based curriculum and instructional practices, to voucher systems, to alternative and charter schools, to stringent accountability measures. An additional idea thought to have the potential of changing what Hess and Leal (2001) refer to as, "the troubled landscape of education" (p. 249) is that of school choice (Hess, 2008).

As this literature review will present, an increased prevalence of school choice now exists across the country. This has led to the surfacing of supply and demand issues and resulted in an increased level of competition for students. Educators find themselves in a position of having to figure out how to attract and retain students or, in essence, market their schools.

In order to consider how schools might identify indicators of parent satisfaction and respond to parent feedback that positively impacts school choice and improvement, this literature review explores the relevant literature associated with school choice, parent satisfaction, and customer service. Given that only

pockets of research exist related to the area of customer service in the field of education, the information contained in this section of the literature review is drawn from the fields of marketing and business. The following literature review covers four major areas: the history of school choice, the parent role in school choice, the application of marketing and business concepts within the context of school choice and parent satisfaction and the examination of service quality as a framework for the measurement of parent satisfaction.

History of School Choice

While choice has not always existed as the mandated or formalized process we now know it to be, parents have been making school choice decisions for years (Betts & Loveless, 2005; Schneider et al, 2000). As long as families have been making decisions about where to live, parents have been making school choice decisions. Historically, if parents wanted to choose a school, they did so either by sending the child to private school or by purchasing real estate in an area located near a desired school. The logic was simple – if you wanted your child to attend a certain public school, then you had to buy a home or figure out a way to live in the neighborhood served by that school (Jellison Holme, 2002). Or, if the assigned public school wasn't to your liking, you could opt to attend a private or parochial school of your choice. These opportunities were more readily available to affluent parents. Recently, parents have used their power of choice to select other options including charter schools, home-schooling and on-line programs.

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While parents may have collected information to assist in making these important decisions, the availability of extensive school performance data and marketing materials was limited and not always considered (Betts & Loveless, 2005). Over the past decade however, the selection of schools has evolved into an extensive research process conducted by parents nation-wide.

On January 8, 2002 the process of choosing a school other than the assigned neighborhood school changed dramatically when an educational act with far-reaching consequences for students, parents, schools and districts was signed into law. The federal No Child Left Behind (NCLB) Act, a reauthorization of the Elementary and Secondary Schools Act of 1965, was implemented "to endorse accountability for results, to provide more choices for parents, to allow for greater local control and flexibility, and to promote an emphasis on doing what has been proven to work based on scientific research," (US Department of Education, 2003).

Since the passage of the NCLB Act, school choice has become a topic of great debate. Much of the school choice debate has been centered upon the merits and obstacles presented by formalized school choice procedures (Betts & Loveless, 2005). The National Working Commission on Choice in K-12 Education, established in 2001, has conducted an extensive examination of school choice and the implications for education. The basic definition of school choice provided by the National Working Commission on Choice in K-12 Education

(2003) is that "choice is any arrangement that allows parents to decide which of two or more publicly funded schools their child will attend" (p. 17) The Commission's report stated that school choice is "here to stay and likely to grow" (2003, 9). As such, the Commission recommended that the time has come to shift the discussion from benefits and challenges presented by school choice to a more pragmatic conversation related to how schools implement choice in a way that is most beneficial to all (2003).

In addition to stringent accountability measures intended improve the quality of education while simultaneously closing the achievement gap, the NCLB Act requires that school districts provide choices to parents of children attending schools that have been identified as consistently failing to meet performance targets. The implications of this portion of the NCLB Act are numerous. In instances where children are attending schools that fail to meet state standards for two consecutive years, parents may transfer them to better-performing schools at the district's expense (U.S. Department of Education, 2003). This element of NCLB exists to mitigate the economic issues associated with school choice and to ensure that all children, regardless of socioeconomic status, have access to high quality schools. Additionally, students may be eligible to receive supplemental educational services including tutoring, after school services and/or summer school (U.S. Department of Education, 2003). While the intent of the NCLB Act was to improve the educational outcome for all children –

regardless of income level or home zip code – the choice process has created an unprecedented level of competition between and within districts across the country.

Once parents make the decision to explore educational options, they quickly learn that a wide variety of alternatives exist. Some options, such as private or parochial schools, magnet and alternative schools and home schooling have existed for years, while others, such as charter schools, innovation schools and internet based programs have gained in popularity over the recent decade (Hess, 2005). As noted in the report issued by the National Working Commission on Choice (2003), voucher programs have also become a part of the picture for families in some states (i.e. Wisconsin, Ohio, Florida, Vermont, Maine and the District of Columbia). These publicly funded voucher programs allow parents to use their vouchers to enroll their children in private schools thereby expanding the availability of educational options.

The NCLB Act requires that states and local school districts provide information to help parents make informed educational choices for their child (U.S. Department of Education, 2003). This communication often comes in the form of a state-issued school accountability report card that summarizes student achievement as reflected by standardized test scores, teacher and administrator experience, teacher turnover rates, safety, attendance and demographic data and other relevant performance metrics. These detailed reports are intended to provide

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parents with valuable information regarding the overall performance and status of a school. What these reports do not provide is a reflection of service quality, parent satisfaction or any of the other multitude of factors that define a school's atmosphere, culture or environment. Use of the school accountability report card alone requires that school quality be inferred through the interpretation of a set of detailed quantitative facts. Research conducted by Schneider et al (2000) and Teske et al (2007) discovered that while this type of performance related information is important to parents as they make school choices, other information is often considered.

In an attempt to provide parents with access to more direct, parent-generated feedback that is based on first-hand experience, on-line resources such as GreatSchools.net have grown in popularity. In most instances these sites provide a general overview, summarize school performance data and provide parent feedback. The information at GreatSchools.net is presented in the form of an overall rating and summary based on assessment data and district information. A second rating is supplied by parents who rate the school based on the following five categories: Principal Leadership, Teacher Quality, Extracurricular Activities, Parent Involvement and Safety and Discipline. Detailed written reviews submitted by parents, teachers, students and other individuals are also available.

Parents' Role in Choice - How Do Parents Choose?

Over time, parents have become very savvy school shoppers. Gone are the days when students automatically attend the nearest, neighborhood school. Multiple issues such as the increased availability of school performance data, the school choice provisions of No Child Left Behind, and the increased levels of competition that exist throughout society, have had an impact on parents and their desire to choose the best school for their child. As Schneider et al. (2000) state, school choice has "transformed the selection of schools for parents from a passive process to an active decision task." In the event that parents decide to engage in the choice process, how do they access the information necessary to make school choice decisions? Schneider et al. (2000) suggest that parents follow a set of steps to make informed decisions. These steps include:

• identifying preferences about education and schooling;

• gathering information about the set of schools available to their children;

• making trade-offs between the attributes of these schools;

• choosing the school that best fits their preferences.

As parents work their way through these steps, do they focus primarily on the information that is provided by districts and schools via the mandates of the NCLB Act? Or, do they seek additional information and if so, how do they locate this information? Moreover, do the steps followed differ depending upon socioeconomic status or ethnicity?

In a study conducted by Teske, Fitzpatrick and Kaplan (2007) 800 low to moderate income parents in Denver, Milwaukee and Washington, D.C. were asked what information they consider and how they gather information to make school choice decisions. Teske et al. learned that parents typically only consider a small number of schools (i.e. two to four) and that these schools are usually in close geographic proximity to their homes. Once parents have identified the schools under consideration, most will gather a great deal of information. The study indicated that approximately 85% of parents visit the schools and nearly 75% examine printed information, talk to teachers and administrators, and bring the child to visit the school (Teske et al., 2007). Over two thirds of the parents reported talking to family, friends, other parents and students (Teske et al., 2007). Finally, Teske et al. discovered that parents considered verbal information shared by other parents, teachers and administrators as the most important mechanism for gathering information. This coupled with site visits that allowed parents to experience the school firsthand outweighed the significance of print materials made available through mailings (Teske et al., 2007).

When Parents Choose, What Do They Want?

With the overabundance of information available to parents, making sense of it all becomes a daunting task. As Schneider et al. (2000) suggest, parents must begin this process by identifying their personal values and preferences and what they expect of a school. Hamilton and Guin (2005) point out that "choice systems

potentially give parents the opportunity to find a school that matches their own

preferences in education" (p. 40). In a comprehensive study conducted by

Schneider et al. (2000), approximately 1,600 parents from two school districts in

New York City and two districts in New Jersey participated in a phone survey

about school choice. Parents were presented with a list of eleven attributes and

asked to indicate hypothetically the top four attributes in order of importance. The

eleven attributes in order of importance as identified by the study participants

included: teacher quality, high test scores, safety, values of the school, discipline,

class size, special programs, racial diversity of student body, location, economic

background of students, and students of the same race attending the school

(Schneider et al., 2000, p. 95). The study's results indicated that parents

consistently emphasize the academic aspects when choosing a school. This

finding was echoed in a survey of charter school choosers conducted by Kleitz,

Weiher and Matland (2000) where it was noted that educational quality and small

class size were the top factors identified by parents of all racial groups and

income levels.

Research conducted by Teske et al. (2007) provides further evidence to

support the above noted findings. In the three-city study previously described, it

was noted that some aspect of academic quality was the top factor in choosing a

school for parents of diverse backgrounds (Teske et al.). This was followed by

curricular or thematic focus of the school (e.g. bilingual, technology, Montessori,

etc.) and then location and convenience (Teske et al.). With that being said,

Teske et al. learned that while the parents in their study clearly cared about

academic quality, they did not use test scores and written reports as their primary

information source. Teske et al. state:

> They [parents] prefer their own observations of the school in action and
>
> the sense of reputation they gather from word of mouth ("soft data").
>
> Indeed, most of the factors that parents use in selecting schools are not
>
> readily conveyed on paper or on a website. (p. 61)

Since the site visit and conversations with other parents are an important

source of information in the school choice process, one must consider what

additional information related to school quality is shared through these processes.

The overall experience of the site visit may provide parents with insight about the

elements that are important to them such as atmosphere and culture – factors that

are not reflected in the reports and on websites. Site visits may provide parents

with an opportunity to collect the "soft data" that becomes a factor in their

decisions.

The Supply and Demand Issues of School Choice

The choice component of the NCLB Act was implemented to provide

students with equal opportunities to attend high quality schools (National

Working Commission on Choice, 2003). Historically, students in a defined

boundary area went to their assigned school with few questions being asked. The

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choice element of NCLB has made school choice more accessible and potentially less disruptive to families interested in attending schools other than their assigned neighborhood school. If a child currently attends a school that is underperforming and has not achieved annual growth targets as defined by the Adequate Yearly Progress component of the NCLB legislation, then the parents of that child may choose to find a better school and the district will have to cover the associated transportation costs (U.S. Department of Education, 2003). As a result, some schools, particularly in urban districts, become highly desired while others suffer tremendous enrollment declines.

Schneider et al. (2000) consider the demand-side of schooling by exploring the concept of what economists call "allocative efficiency." Allocative efficiency refers to the matching of customer preferences and the product or performance provided (Schneider et al., p. 89). If choice is to work, then there must be a sufficient supply of schools that match the preferences and demands of parents. In support of this position, Hamilton and Guin (2005) suggest that once a choice is made, parents must monitor the school's progress and select a new school if the original choice was not correct. Eventually this cycle should lead to the creation of a supply of schools that are reflective of parental preferences and provide existing schools with incentive to improve upon the dimensions that parents' value most (Hamilton and Guin, p.31).

The current reality is that the demand for high quality, top-performing schools currently exceeds the supply (Hess and Petrilli, 2009). Theoretically, enabling parents to choose schools should create a competitive force that influences schools to address performance and quality issues thereby increasing supply and driving demand. Schneider et al. (2000) state:

> Allocative efficiency increases when parental choice leads to a better match between what parent-consumers want and what they get. Productive efficiency increases when schools, the suppliers of public education fall under competitive pressure to improve the quality of their product to attract and retain parent-consumers (p.164).

Both allocative and productive efficiency play a crucial role in education today. Limited supply has led to increased competition in a field that has not been known for its competitive edge. Hess and Petrilli (2009) state that the moral rightness of choice has been celebrated but "the construction of vibrant educational markets" has not occurred (p.67). Schools in high demand are limited by physical size restrictions as to the number of students that can be accepted. In many urban districts throughout the country, demand for high quality schools exceeds the supply. As such, parents compete for limited space in popular programs and the remaining schools must compete for students in order to acquire the per-pupil funding required to keep their doors open. Again, some researchers

argue that choice process has not led to an increased supply of quality schools as originally intended (Schneider et al. (2000) and Hamilton & Guin (2005).

Different approaches to increasing supply continue to be tried. Reform efforts include new school design, innovation grants, approval of charter applications and a multitude of other strategies designed to make schools more appealing to prospective parents. But is there a way that supply can be increased by examining and improving service quality thereby increasing customer satisfaction?

Business and Marketing Models of Customer Satisfaction

As previously noted, customer satisfaction and service quality are well-studied concepts in the fields of marketing and business. However, the availability of information related to customer service in education is somewhat limited and what research is available is often focused on higher education. As such, much of the literature reviewed in this section stems from the fields of business and marketing.

Before launching into an in depth review of the research from the fields beyond education, it should be noted that the application of business concepts in education is sometimes met with resistance (Joseph and Joseph, 1997, p. 15). Kotler and Fox (1997) also state that educators have raised many concerns about the use of marketing concepts for education. Primary among these concerns is that the purpose of educational organizations is to develop knowledge and skills

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whereas the main purpose of marketing is for companies to make a profit (Kotler and Fox, 1997). Yet if one accepts the concept that "marketing is the task of identifying specific consumer needs that thereby enable providers to develop goods and services to satisfy these needs," then it would stand to reason that marketing is an appropriate concept to consider in education (Joseph and Joseph, 1997, p.16).

So, for the purposes this literature review and to develop an understanding of how marketing and business concepts may be applicable to schools, the concept that there is much to be learned from the successes in the business field will be embraced with the understanding that with modification, many concepts can be applied to the current examination of the interplay between customer (parent) satisfaction and school choice.

As Kotler and Lee (2007) point out, "one of the fields that has been most overlooked and misunderstood by public sector personnel is marketing." They go on to state that, "marketing turns out to be the best planning platform for a public agency that wants to meet citizen needs and deliver real value" (Kotler and Lee, 2007). In order to so, however, the organization must develop an understanding of what it is that the customer, or in the instance of school choice the parent, desires and expects. The identification of these desires and how well a company meets or exceeds them has long been an area of prime focus in business and marketing research.

In the early 50's, Peter Drucker made the claim that "there is no business without a customer," (Kotler, 1997). This statement has survived the test of time and driven a customer-focused approach for businesses around the world for decades (Reis et al., 2003). Corporate leaders and managers have come to realize that it is the actions and behaviors of customers that determine the profitability of companies and thus an entire industry dedicated to understanding the "customer" has flourished (Bhote, 1996).

Customer service, customer satisfaction, customer loyalty, and service quality are terms frequently heard in the fields of business and marketing. In fact they have been a particularly popular area of study since the mid 1950's when Peter Drucker made it clear that "the purpose of a business is to create customers," (Kotler, 1997, p.). While the concepts are all interrelated, when one considers the evolution of "customer service," clear distinctions between these concepts can be made (Schneider and White, 2004). This section of the literature review provides an overview of these concepts.

The concept of customer service goes as far back as medieval times and finds its roots in the master-servant relationship (Reis et al., 2003, p.195). In fact, Reis et al. (2003) suggest that for as long as one human has been providing assistance to another, service has been in existence (p. 195). Prior to the industrial revolution, products and services were most often provided through individual interactions with shop owners and highly skilled craftspeople that maintained

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close contact with their customers (Customer Satisfaction, 2008; Reis et al., 2003). While individualized service may have been the norm at this time, the cost of production was high and only the wealthy could afford many goods and services (Customer Satisfaction, 2008).

As Europe and America entered into the industrial revolution, factory manufacturing and mass production became more established (Customer Satisfaction, 2008; Reis et al., 2003). While this era radically increased the availability of products and led to a decrease in production costs, it also changed the nature of individual customer interactions (Customer Satisfaction, 2008). With the introduction of increased foreign competition in the 1980's, the quality of American goods and services came into question (Customer Satisfaction, 2008). It was at this point in time that companies began to recognize that quality matters and that customer desires and expectations could not be overlooked (Customer Satisfaction, 2008). Price and Jaffe state that customer service must be treated as "the canary in the coal mine that can provide invaluable feedback about a company's competitors, current product faults, future requirements, and much more" (p. 3).

In today's marketplace, customer service is defined as, "the activities that enhance or facilitate the purchase and use of a product or service" (Baird and Reece, 2007). As Price and Jaffe (2008) point out, customer service is a term used to refer to both the sequence of events that lead to up to the purchasing of a

product or service as well as the interaction that takes place between the customer and provider after a transaction is complete. As such, customer service can have a significant impact on customer satisfaction.

Customer satisfaction refers to a person's feelings of contentment or disappointment resulting from comparing a product's perceived performance in relation to his or her expectations (Kotler, 1997) or, more simply, how well a customer's expectations about a product or service have been met (Customer Satisfaction, 2008). Customer satisfaction is influenced by not only the quality of a product, but also by the quality of the service the customer receives, the atmosphere of the business in which they complete the transaction, and various other intangible factors (Customer Satisfaction, 2008). Since the mid-1990's the measurement of customer satisfaction and the analysis of satisfaction data and associated factors has been the subject of extensive research (Customer Satisfaction, 2008). It can be a difficult concept to measure as it is based on personal experience and is a highly subjective, psychological state (Customer Satisfaction, 2008).

Nonetheless, customer satisfaction is often what companies and organizations measure in an effort to increase profitability, market-share, and to define areas for improvement (Hallowell, 1996). This is typically done through the use of surveys or questionnaires conducted in person, through the mail, over the phone, or on the Internet (Customer Satisfaction, 2008). Customer satisfaction

surveys tend to vary in length but usually focus on a number of components that examine the customer's overall level of satisfaction with an experience (Customer Satisfaction, 2008). The questions included in such surveys tend to focus on the following (Customer Satisfaction, 2008):

- Quality – how well a product is made, how well it meets the customer's needs, how knowledgeable and approachable the salesperson was

- Value – the customer's sense of how much quality was received in relation to the price paid

- Time Issues – whether the product was available, the amount of time provided by the salesperson, the amount of wait time it took to complete the transaction

- Atmosphere – how clean, organized and pleasant the location was

- Service Personnel – whether store or service representatives made a good impression, were appropriately dressed, polite, attentive and helpful

- Convenience – the accessibility of the location, availability of parking, hours of operation

Customer satisfaction has become increasingly important to monitor in an era where word-of-mouth marketing has become an extremely powerful source of information for consumers. It has been noted that less than 5 percent of customers

express dissatisfaction directly to a company but that a dissatisfied customer does express his or her dissatisfaction to approximately nine other people (Customer Satisfaction, 2008). When satisfied, customers do not share their satisfaction as widely as their complaints, as it is estimated that satisfied customers tell approximately five other people about their positive experiences (Customer Satisfaction, 2008). The accessibility of information over the Internet makes these estimates appear modest when one considers how quickly and widely information can be shared through e-mails, blogs and consumer websites. If a customer is dissatisfied, he or she can share these frustrations over the Internet with thousands of people in a matter of seconds (Price and Jaffe, 2008, p 4).

When high levels of customer satisfaction exist, customer loyalty and retention become the next links in the chain of customer service. Customer retention refers to the percentage of customers that once established, a business is able to maintain on a long-term basis (Customer Retention, 2007). Customer loyalty refers to the feelings of attachment a customer has to a product or service and the customer's willingness to purchase services from that same supplier time and again (Hallowell, 1996). Business owners have come to realize that developing loyal customers and retaining them is the key to increasing a company's overall revenue (Bhote, 1996 and Kotler, 1997). The importance of customer retention and loyalty is further supported by the fact that the cost of

attracting and acquiring new customers is a costly process that exceeds by several

times the annual cost of serving existing customers (Customer Retention, 2007).

Kotler (1997) states that when the product performance or service

outcomes meet expectations, then the customer is merely satisfied (p. 40). But, if

the performance exceeds expectations, then the customer may be highly satisfied

or delighted (Kotler, 1997, p.40). Kotler (1997) states that when customers are

simply satisfied, they may still consider switching to a competitor when a better

offer comes along (p.40) . However, when customers experience high satisfaction

or delight, an emotional connection is established, the result of which is high

customer loyalty (Kotler, 1997). The most basic tools for developing customer

loyalty and increasing retention are the provision of a superior product and service

quality (Customer Retention, 2007). However, customer loyalty and retention

cannot be thought of as stand-alone programs, they must be a part of an overall

plan for customer relationship management (Customer Retention, 2007).

The most recent step in the evolution of customer service is that of

customer relationship management (CRM). CRM is refers to the process of

utilizing software and databases to monitor a company's interactions with its

customers in order to increase revenue (Customer Relationship Management,

2002). While CRM began in the mid-1990's it was a complex and expensive

process riddled with disappointment (Wagner-Marsh, 2006). Over a decade later,

CRM has now become a widely used marketing process for some of the world's

largest industries including banking, telecommunications, technology (Wagner-Marsh, 2006). By tracking interactions with customers, CRM helps companies learn about their customers which then allows them to anticipate customer needs, channel appropriate customer support and increase rates of satisfaction, all of which results in lower costs and higher profitability (Customer Relationship Management, 2002).

An example of an organization where CRM is a fundamental component of the business is Amazon.com (Price and Jaffey, 2008). Each time a customer interacts with Amazon.com, information about what they consider purchasing, have purchased in the past, their preferred media type, methods of payment and shipping locations, is collected (Price and Jaffey, 2008). With this information, Amazon is able to anticipate customer needs and ultimately provide customers with an easy and highly efficient on-line shopping experience that not only results in customer satisfaction but also drives profitability for the company (Price and Jaffey, 2008). It is expected that as new technologies become available, CRM will continue to expand thereby providing companies with the information they need to provide customers with experiences that lead to high satisfaction and customer loyalty (Customer Relationship Management, 2002).

Schools also need to develop loyalty and relationships with parents. In order to do so, customer satisfaction becomes a consideration for schools. When applying marketing concepts to education, the parent assumes the role of

customer and the educational experience becomes the product or service. Taylor and Baker (1994) define customer satisfaction as the result of experiencing service quality and comparing that with what is expected. The customer then makes a judgment about satisfaction based on the results of the experience-expectation comparison (Taylor and Baker, 1994). While each of these concepts has a separate and distinct definition, it is clear that there is interplay between quality, effectiveness and satisfaction and that all three elements can have an influence on one's perception of a school.

Customer Service, Satisfaction, Loyalty, and Service Quality in Education

To place these concepts of customer service, customer satisfaction and customer loyalty and service quality in relation to education requires some shifts in thinking. First and foremost, as previously stated, parents must be thought of as "the customer" who has a voice and is respected for identifying what is important. The product or service they pursue is the education of their child. Customer service can be considered as the set of experiences parents have as they interact with a school. It encapsulates things such as interactions with school personnel, school-to-home communication, overall physical condition of the school, and a multitude of other elements.

Customer satisfaction then becomes synonymous with parent satisfaction. When parents are asked to complete satisfaction surveys it is usually an attempt to measure how well the parents' perceptions of how well the school is performing

in a variety of categories. It should be noted however, that since customer satisfaction is defined as a comparison between perceived performance in relation to one's expectations, satisfaction is highly subjective (Schneider and White, 2004, p.10). This is particularly so in education where the vast majority of parents have had many educational experiences of their own. These experiences as well as the hopes and dreams they hold for their child, shape their expectations. As such, parent expectations are often infused with emotion and this drives the importance of satisfaction.

Furthermore, traditional measures of school satisfaction are somewhat presumptuous and patronizing in nature due to the fact that it is the school officials who determine what is to be measured thereby making the assumption that what is considered to be important to the school officials will also be important to parents. This may cause schools to be misguided in their efforts to identify areas for improvement.

Customer loyalty becomes an important conversation in the age of school choice. It may be slightly odd to think of loyalty in terms of schools, however, research shows that when parents are connected to their child's school and have taken an active role in choosing that school, their level of satisfaction is higher, as is their willingness to work through difficult situations (Goldring and Phillips, 2008).

Finally, the work of A. O. Hirschman (1970) demonstrates what happens when customers become dissatisfied and have not reached a level of loyalty. Hirschman (1970) explores the concepts of "exit" and "voice" in examining what happens when clients become dissatisfied with the quality of an organization's product or service. He states that the client will exit and seek the service elsewhere or they will use their voice to register complaints with the organization (1970). Either way, the organization is driven to improve the quality of its product to retain or regain clients (1970). The "exit" strategy can be aligned with the school choice process, while the feedback provided by the "voice" strategy is information that school satisfaction surveys may be designed to capture.

Service Quality

As noted in the previous section of the literature review, customer service, satisfaction, loyalty, and retention are highly influenced by the quality of services provided. Research in the field of service quality is extensive and so, this section contains an in depth review of the work completed in this area.

Supply and demand issues cannot be fully addressed without the consideration of quality and satisfaction. As parents engage in the school choice process, they simultaneously evaluate schools and make judgments about school quality. How each individual defines service quality and what attributes they consider to be most important is a matter of personal preference and experience (Schneider and White, 2004). As Schneider and White (2004) point out, the "user-

based approach" to defining quality takes on the view that "quality is subjective and hinges on the individual perceptions of customers" (p.10). Hamilton and Guin (2005) support this position and state that the precise meaning of quality differs vastly amongst professionals within the field of educational research. If the experts have difficulty agreeing on what defines school quality, then there is an even greater likelihood that the definition of school quality will vary across parent groups when one considers the expanse of background experiences and individual preferences that may influence the assessment of school quality and parent satisfaction. Joseph, Yakhou and Stone (2005) state that ultimately it is the customer or consumer of the service or product to decide what the term "quality" means. They go on to state that this decision should not be left exclusively to school administrators (Joseph et al. 2005).

Schneider et al. (2000) state, "A key issue, given choice, is whether or not parents will select schools on dimensions or on non-educational dimensions that they value." (p. 89). While parents' concepts of quality may involve "non-educational" dimensions, these factors are important to parents. Hamilton and Guin (2005) argue that educators tend to focus on the academic performance of schools and that parents who do not emphasize this aspect are ill-informed (p.49). This is particularly evident when one examines the content of a school accountability report. The vast majority of the information contained in these reports focuses on academic indicators. Parents, however, in assessing the quality

of a school often consider ancillary items such as the availability of before and after school care or the school's distance from home (Hamilton and Guin, 2005). The primary concern of critics is that if school quality is to be defined by non-academic criteria, then the focus will shift away from student learning. Hamilton and Guin (2005) state:

 The assertion that parents should only make choices on the basis of academic quality fails to recognize the diversity of contexts in which families are making decisions…Even parents who value academic outcomes above other considerations are likely to incorporate information other than test scores into their decisions. (p.49)

While parents will go in search of a high quality education for their child, the definition of school quality varies by person and by family. Additionally, information that specifically reports measures of school quality as defined by parents is not always easily accessible. Within the field of education, the definition and measurement of quality has proven to be somewhat nebulous. Quality is not a stand-alone category on school accountability report cards, nor is it something that can be easily measured and reported by a single measure.

In the private sector and business domain, the discussion of quality is commonplace and a customer-driven approach to quality improvement has been the norm for decades (Salisbury et al., 1997). Over time a variety of tools have been developed to examine the quality of the customers' experiences (Salisbury et

al., 1997). In the late nineties, the service quality approach began to enter into education as multiple studies concentrated on how service quality might impact schools. A fundamental shift required those in the field of education to think of students, parents, and the community at large as "customers" and the child's education and set of experiences as the product and service supplied by the public education system (Salisbury et al., 1997).

Zeithaml, Parasuraman and Berry (1990) have conducted extensive research in the area of customer service and service quality. They maintain that, "service quality has become a key marketing tool for achieving competitive differentiation and fostering customer loyalty," (Zeithaml and Parasuraman, 2004). In a field where competition is on the rise, schools would do well to consider strategies for improving their attractiveness to customers.

Zeithaml and Parasuraman (2004) have learned that customers evaluate service quality by comparing what they expect with how a service provider actually performs. They define service quality as the difference between customers' expectations of service and their perceptions of actual service performance (Zeithaml, et al). Through their research, Zeithaml, Parasuraman and Berry (1990) developed a methodology for measuring service quality. Their work began with an extensive set of twelve focus group interviews where the criteria customers use to judge service quality were discussed. After analyzing the data,

Zeithaml et al. identified ten general criteria or dimensions that customers

consider when defining service quality. See Table 1.

Table 1

Original ten dimensions of Service Quality

Dimension	Definition	Specific customer questions
Reliability	Ability to perform the promised service dependably and accurately.	When a loan officer says she will call me back in 15 minutes, does she do so? Does the stockbroker follow my exact instructions to buy or sell? Is my credit card statement free of errors? Is my washing machine repaired right the first time?
Tangibles	Appearance of physical facilities, equipment, personnel and communication materials.	Are the bank's facilities attractive? Is my stockbroker dressed appropriately? Is my credit card statement easy to understand? Do the tools used by the repair person look modern?
Responsiveness	Willingness to help customers and provide prompt service	When there is a problem with my bank statement, does the bank resolve the problem quickly? Is my stockbroker willing to answer my questions? Are charges for returned merchandise credited to my account promptly? Is the repair firm willing to give me a specific time when the repair person will show up?

Dimension	Definition	Specific customer questions
Competence	Possession of the required skills and knowledge to perform the service.	Is the bank teller able to process my transactions without fumbling around? Does my brokerage firm have the research capabilities to accurately track market changes? When I call m y credit card company, is the person at the other end able to answer my questions? Does the repair person appear to know what he is doing?
Courtesy	Politeness, respect, consideration, and friendliness of contact personnel.	Does the bank teller have a pleasant demeanor? Does my broker refrain from acting busy or being rude when I ask questions? Are the telephone operators in the credit card company consistently polite when answering my calls? Does the repair person take off his muddy shoes before stepping on my carpet?
Credibility	Trustworthiness, believability, honesty of the service provider.	Does the bank have a good reputation? Does my broker refrain from pressuring me to buy? Are the interest rates/fees charged by my credit card company consistent with the services provided?

Dimension	Definition	Specific customer questions
Security	Freedom from danger, risk or doubt.	Is it safe for me to use the bank's automated teller machines? Does my brokerage firm know where my stock certificate is? Is my credit card safe from unauthorized use? Can I be confident that the repair job was done properly?
Access	Approachability and ease of contact.	How easy is it for me to talk to senior bank officials when I have a problem? Is it easy to get through to my broker over the telephone? Does the credit card company have a 24-hour toll-free telephone number? Is the repair service facility conveniently located?
Communication	Keeping customers informed in language they can understand and listening to them.	Can the loan officer explain clearly the various charges related to the mortgage loan? Does my broker avoid using technical jargon? When I call my credit card company, are they willing to listen to me? Does the repair firm call when they are unable to keep a scheduled repair appointment?

Dimension	Definition	Specific customer questions
Understanding the Customer	Making the effort to know customers and their needs.	Does someone in my bank recognize me as a regular customer?
		Does my broker try to determine what my specific financial objectives are?
		Is the credit limit set by my credit card company consistent with what I can afford?
		Is the repair firm willing to be flexible enough to accommodate my schedule?

Using these ten service quality dimensions, Zeithaml et al., developed an instrument designed to measure customers' perceptions of service quality. Through the initial testing of this tool, the results indicated that the relationships among the ten original dimensions were strong enough to cluster them into two broader categories that were labeled Assurance and Empathy (Zeithaml et al., 1990). Table 2 demonstrates how the ten categories were collapsed into five (Zeithaml et al, p.25).

Table 2

Original Ten Service Quality Dimensions Reduced to SERVQUAL Dimensions

Original ten dimensions	SERVQUAL Dimensions				
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Tangibles	██				
Reliability		██			
Responsiveness			██		
Competence Courtesy Credibility Security				██	
Access Communication Understanding the Customer					██

The final five service quality dimensions are defined by Zeithaml et al. as follows:

1. *Assurance:* Knowledge and courtesy of employees and their ability to inspire trust and confidence (combines original dimensions of competence, courtesy, credibility and security).

2. *Empathy:* Caring individualized attention the firm provides its customers (combines original dimensions of access, communication and understanding the customer).

3. *Reliability:* Ability to perform the promised service dependably and accurately.

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4. *Responsiveness:* Willingness to help customers and provide prompt service.

5. *Tangibles:* appearance of physical facilities, equipment, personnel and communication materials.

Gronroos (1990) has also done extensive research in the area of service quality. His model focuses on the process and external consequences associated with service management. He suggests that service management is divided into the following six principles: (1) business logic and what drives profit, (2) decision-making authority, (3) organizational structure, (4) supervisory control, (5) reward systems, and (6) measurement focus (Gronroos, 1990). The linear sequence of these principles begins with the understanding that customers' perceptions of service quality drive profits. The main goal is to make decisions and define structures that are structured to support service quality improvement (Gronroos.) He states that "customer satisfaction with service quality must be the ultimate measure of achievement" (Gronroos, 1990).

Measuring Service Quality

The research conducted by Zeithaml, Parasuraman and Berry (1985) identified five service quality dimensions as noted in the previous section. These dimensions were then used to develop a survey tool known as SERVQUAL. SERVQUAL is the most widely used tool for measuring service quality (Schneider and White, 2004). It is a survey comprised of 22-service attribute

statements that are aligned with the five service quality dimensions defined by

Parasuraman, Zeithaml and Berry (1985). Customers are asked respond to two

identical sets of statements – the first time to measure their expectations in

relation to a company that provides excellent service and a second time to

measure the performance of an identified company. In both instances, the

customers respond using a 7 point Likert-type scale on each of the 22 items that

measure the five service quality dimensions (Zeithaml, Parasuarman, and Berry,

1990). The difference between the respondents' expectations and perception

ratings is presented as the external, "Customer" measure of service quality as it is

a score established by individuals from outside of the company or organization

(Zeithaml, Parasuraman and Berry, 1985).

Parasuraman, Zeithaml, and Berry (1988) have noted that SERVQUAL

was designed to be applicable across a broad spectrum of services and as such, the

SERVQUAL tool "provides a basic skeleton" for questions pertaining to each of

the five service-quality dimensions (Zeithaml, Parasuraman and Berry, 1990).

Statements can and should be modified or supplemented to fit the unique

characteristics and research needs of a particular organization (Zeithaml,

Parasuraman and Berry, 1990). That is, questions for each of the service quality

dimensions can be made more specific by aligning details from the five categories

with the purpose of the organization being assessed. For example, in the tangibles

dimension the SERVQUAL question that is stated as, "The organization has

modern-looking equipment." An educational organization may modify the question to read, "The textbooks and instructional materials meet State standards."

If the ultimate goal of collecting data using a tool such as SERVQUAL is to improve the quality of service being provided, then the data must be analyzed and presented in a manner that will help organizations identify where gaps exist between customers' expectations and perceptions of performance. Parasuraman, Zeithaml and Berry (1985) developed the Gaps Model of Service Quality as an extension of SERVQUAL. This method of analysis was created in an effort to collect meaningful data that could inform an organization's next steps for closing the gap between customer expectations and performance (Zeithaml and Parasuraman, 2004). It requires that SERVQUAL be administered to individuals from within an organization to assess how they think their customers feel about the various service quality dimensions (Zeithaml, Parasuraman and Berry, 1990). This data is referred to as the internal "Provider" data. The difference between what employees of a company think their customers want or believe to be important and their customers' perceptions of performance are compared through the Gaps Model (Zeithaml, Parasuraman and Berry, 1990).

To close the customer gap, Parauraman, Zeithaml and Berry contend that four "provider gaps" need to be examined and closed, as they are the underlying cause for the "customer gap" (1985). By fully examining the differences between

customer and provider responses, an average gap score can be calculated for each

service attribute. These gaps can then be examined to determine areas where the

expectations and performance don't match. The gap scores identify areas for

improvement (Zeithaml and Parasuarman). This method presents gaps that may

exist in the following four areas:

GAP 1: *Not Knowing what Customers Expect* – This gap is the difference

between customer expectations of service and the company's understanding of

those expectations.

GAP 2: *The Wrong Service Quality Designs and Standards* – This gap

reflects the discrepancy that exists between managements' perceptions of

customers' expectations and service-quality specifications.

GAP 3: *Not Delivering to Service Standards* - The discrepancy that exists

between service-quality specifications and actual service performance.

GAP 4: *Not Matching Performance to Promise* - The discrepancy that

exists between actual service delivery and what is communicated to customers

about it.

A series of studies examining the effectiveness of SERVQUAL and the

Gaps Model across different contexts have been conducted since the early 80's

(Zeithaml and Parasuraman, 2004). It has been successfully tested in both the

public and private sectors in fields such as real estate, medicine, accounting, retail

marketing, the fast food industry and higher education (Zeithaml and

Parasuraman, 2004). It has been noted however, that while the Gaps Model provides a comprehensive measurement and comparison of the service quality dimensions as they are perceived by various constituent groups who have experience with and knowledge of a specific organization, the model has been criticized for being cumbersome and confusing for those completing the survey and those responsible for examining the data (Morrison Coulthard, 2004). Additionally, Morrison Coulthard (2004) states that there is considerable evidence to suggest that a perception score alone can be as effective in predicting overall service quality as can the more detailed gap score.

For the purposes of this study, the attribute statements for each of the service quality dimensions as defined by SERVQUAL will be used to develop a parent satisfaction survey. The customer gaps will be measured by calculating the difference between the mean importance and performance ratings. The provider gaps will not be calculated at this time as it is anticipated that the information provided by the customer gaps will be sufficient to indicate areas for improvement.

Measures of Parental Satisfaction

For several years organizations have recognized that measuring customer service is an important part of management and strategic planning (Crosby, 1993). Schools and districts commonly use satisfaction surveys to collect data from parents regarding a wide variety of topics. This has become increasingly popular

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as schools have moved toward data-driven decision-making and competition amongst schools has increased. Crosby states that the measurement of customer service is critical "in competitive markets where customers have numerous options should they become dissatisfied" (p.389).

As Salisbury et al (1997) point out, surveys can be useful in that they provide a type of "report card" of customer satisfaction but they do not always provide information that can be used to diagnose specific areas for improvement. The usefulness of the satisfaction survey results is dependent upon the survey design, the questions that are asked, analysis of the data and the presentation of findings. Salisbury et al. (1997) state that while customer-driven quality improvement has been embraced in both the public and private sectors, schools seem to be preoccupied with the measurement of satisfaction as a retrospective indicator of parent happiness. They continue by saying, "…the education industry has frequently abstained from or struggled with how to incorporate customer satisfaction measurement into the quality improvement process" (Salisbury et al. p.287). That is, while the satisfaction data is collected, it is not used to inform school improvement efforts. Additionally, the more complex the measurement tool, the less likely it is to be put to use. This has been a criticism of SERVQUAL and the Gaps Model (Joseph et al., 2005).

Just as there are different ways to administer surveys (i.e. on-line, paper pencil, phone interviews, face-to-face interviews, etc.) there are many different

ways to present the data gleaned from satisfaction surveys. The value of the

survey is lost if the results are not put into a format that is meaningful and

actionable by those who would be most impacted by the survey data.

Making Sense of Satisfaction Data

If one goes to the lengths of collecting information regarding customer

satisfaction, then it is important to find a way of representing this information in a

manner that is useful, easy to interpret and leads to action. Much of the research

in the area of service quality and customer satisfaction focuses on an examination

of the gaps that exist between what customers believe to be important and the

level of performance an organization provides.

As previously noted, Zeithaml, Parasuraman and Berry (1985) describe a

detailed process for gap analysis as a part of the SERVQUAL process. Another

method that has been used to examine this difference is Importance-Performance

Analysis (Martilla & James, 1977 p. 77 and Joseph, Yakhou, & Stone, 2005,

p.66). Regardless of the method used to examine these differences, the difficulty

lies in translating the results into action (Martilla & James, 1977 p. 77)..

Importance-Performance Analysis

In the late seventies, Martilla & James (1977) developed a model that

would not only help organizations identify important service attributes, but that

would also examine the differences between customer expectations and

performance (Martilla & James, 1977, p.77). Using this method, a graphic

representation of the difference between customer's assigned levels of importance and performance can be created. The importance-performance grid (IP grid) plots the survey results along an X-Y axis divided into four quadrants. As Figure 1 depicts, the vertical axis of the grid represents the level of importance and the horizontal axis represents the level of performance (Martilla & James, Joseph, Yahou & Stone). Each quadrant is labeled and signifies the following marketing efforts or attention statements:

- *Quadrant A Concentrate Here* – the top-left quadrant consists of factors that customers consider to be of high importance but have a low performance rating.

- *Quadrant B Keep-Up with the Good Work* – the top-right quadrant consists of service factors that customers consider to be of high importance and also have a high performance rating

- *Quadrant C Low Priority* – the bottom-left quadrant is reserved for factors that have low importance rating coupled with a low performance rating.

- *Quadrant D Possible Overkill* - the bottom-right quadrant is comprised of factors that customers perceive to be low importance but high performance.

Extremely Important

A
Concentrate
Here

B
Keep Up the Good
Work

Poor
Performance

Excellent
Performance

C
Low Priority

D
Possible
Overkill

Slightly Important
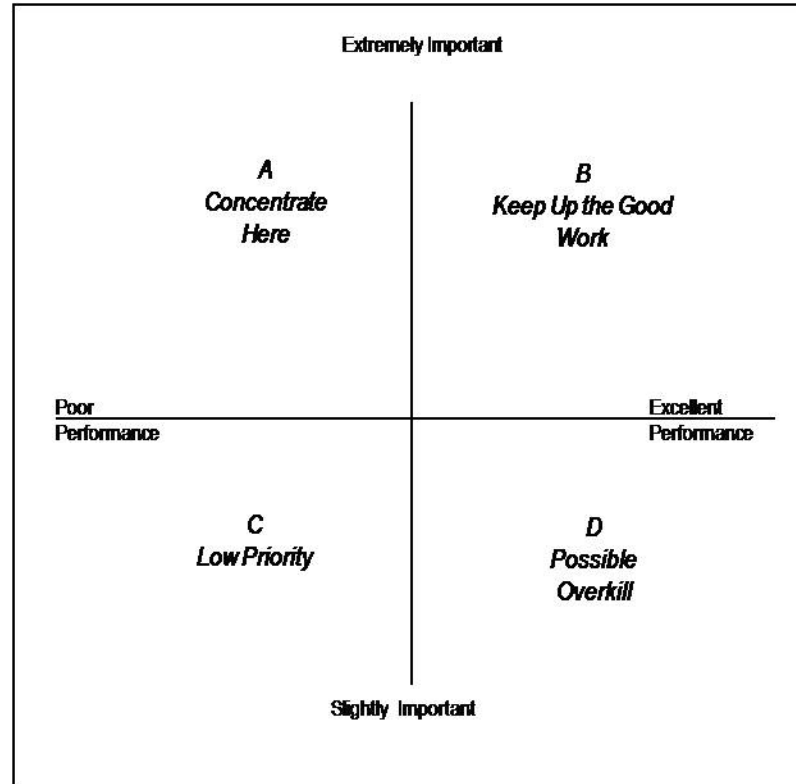
Figure 1. Importance-Performance Grid with attribute ratings.

As Martilla and James (1977) state, an attractive feature and benefit of importance-performance analysis is that the results may be graphically displayed on this easily interpreted two-dimensional grid (p.77). Through the use of an IP grid, organizations are provided with a visual tool for translating customers' ratings for importance with their perceptions of performance for service quality to help them determine the highest priorities for improvement (Bacon, 2003).

The difficulty with the importance-performance grid relates to the positioning of the horizontal and vertical axes. Martilla and James (1977) state, "positioning of the grid is a matter of judgment" (p. 79). The cross-point (i.e. the

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point where the X and Y axes cross) of the grid may be set at the mean for importance and the mean for performance or the median for each (Bacon, 2003). Bacon states, "one of the shortcomings of the approach is that a slight change in an attributes position along an axis may lead to a dramatic change in the attribute's inferred priority for improvement" (p. 58).

The Difference Between "Expectations" and "Importance"

SERVQUAL and IPA are both used to examine similar elements in relation to service quality. They both elicit responses regarding perceived performance of an organization in relation to service quality dimensions. The primary difference between the two models is the focus on what the customer values. SERVQUAL measures the customers' "expectations" of the level of service that would be delivered by excellent companies in a sector (Zeithaml and Parasuraman, 2004). IPA measures the level of "importance" that customers' assign to various attributes.

While the difference between the two concepts is subtle, it warrants discussion. An organization must consider the ultimate goal of service quality data collection. If the organization wants to improve service quality in order to become more attractive and competitive, the organization needs to know what is important to the customers and how its performance compares in order to be more strategic with the design of improvement efforts. For example, if you are underperforming in an area that is not of high importance, perhaps you may divert

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your attention and resources to an area of more significant need. With

SERVQUAL, a customer may well be able to define his expectations for service

as they relate to a particular service attribute, and his response may indicate that

there is a discrepancy between the expectation and level of performance, but

without knowing if the that specific attribute is of high importance to the

respondent, then the organization cannot determine if this is the most critical area

for improvement.

Zeithaml, Parasuraman and Berry (1990) addressed this issue by adding a

"point-allocation question" to the SERVQUAL instrument. This question is used

to ascertain the relative importance of the five dimensions by asking respondents

to allocate a total of 100 points among the five dimensions. These points can then

be used to calculate weighted SERVQUAL scores that measure not only the

service quality gap for each dimension, but also the relative importance for the

dimensions (Zeithaml and Parasuraman, 2004).

While the "point-allocation question" presents a way to define the

importance of the various service quality dimensions when using the SERQUAL

survey technique, this may be a complex set of calculations that becomes too

detailed for schools to practically put to use. It also creates a third element to the

SERVQUAL instrument that may lead to a fatigue factor for respondents.

Summary

While urgent calls for school reform have been issued in the past, never before have the stakes been so high for so many students, parents and schools. As this chapter summarized, the implementation of the No Child Left Behind Act has introduced an intensified level of accountability for schools that is coupled with mandates to provide parents with choice. Choice has elevated the level of competition within the field and because student enrollment determines school funding, it is imperative that schools drive demand.

Additionally, choice has caused parents to assess both the quality of the educational product as well as the quality of the service. Typically, schools measure and report quality through the use of student achievement data and parent satisfaction surveys. Both of these data sources serve as measures of affirmation and are not always translated into information that can be used by school personnel to guide improvement efforts. For schools to remain competitive they must not only produce academic results, but they must also be responsive to parents' needs and expectations. Therefore, it is critical that principals possess explicit information to help them create desirable schools.

The following chapters examine how the service quality dimensions can be a measure of parent satisfaction and how these results can define areas of strength and determine priorities for improvement in order to drive school demand.

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Chapter 3

Method

This study examined three elements related to service quality and school satisfaction: the level of importance parents assign to the various service quality dimensions as they define school satisfaction; parents' perceptions of school performance relating to these dimensions at four urban elementary schools; and, the usefulness of the survey and accompanying data in providing information to principals regarding parent satisfaction. The purpose of this study was threefold and addressed the following questions:

1. Are service-quality dimensions important to parents? Is there a statistically significant difference between the importance and performance ratings of the service quality dimensions identified by parents as being important, and do these ratings vary by school or demographic variable category (i.e. ethnicity, socio-economic status)?

2. Is there a relationship between the level of importance assigned by parents to the service quality dimensions and the perceived levels of performance at each of the schools in the study?

3. What are principals' perceptions of the usefulness of this survey's results in guiding school improvement efforts?

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Site Selection and Sampling

In order to be able to fully investigate the research questions and to determine if the levels of importance and performance for the five service quality dimensions differed by ethnicity, socioeconomic status or grade level; it was imperative that the schools selected to participate in this study demonstrate representation from all ethnicities and income levels. Additionally, to limit the potential for confounding variables, it was important to select schools that had similar percentages of English Language Learners and Special Education students. While the Denver Public School (DPS) district is very diverse, a limited number of schools actually have heterogeneous student populations that match the parameters noted above. As such, the number of schools eligible to participate was rather narrow. The researcher used the following information to identify eight schools as potential sites for the study:

- School Enrollment Size

- Free and/or Reduced Lunch Rate

- Percentage of Minority Students

- Percentage of English Language Learners

- Percentage of Special Education Students

- Choice-In/Choice-Out Status

From the original group of eight schools, the researcher identified four as study sites. It was felt that these four schools each served students and families

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from across the socio-economic spectrum with the Free or Reduced Lunch

percentages ranging between 40% and 67%. Additionally, each school

represented a variety of ethnicities with the percentage of minority students

ranging between 46.1% and 69.2%. The percentage of language learners ranged

between 11.5% and 15.6% and the percentage of Special Education students was

between 7.9% and 22.6%. Schools 3 and 4 had slightly higher percentages of

Special Education students as each school had a center-based program for

students with severe needs. Table 3 describes the characteristics of each school in

detail.

Table 3

Demographic breakdown of participating schools

School	Enrollment	Families[a]	FRL %	Minority %	ELL[b] %	Special Ed %
1	586	460	46.6	69.2	11.5	10.5
2	474	296	42.6	46.1	14.2	7.9
3	353	211	67.1	56.6	12.9	22.6
4	354	284	40.0	46.5	15.6	14.6

Note. To preserve the identity of study participants, schools were referenced by number. [a]This number reflects the number of families attending each school to provide one survey per family. [b]English Language Learners

Three different district departments provided access to these four schools

after a series of individual meetings with the directors for the Department of

Research and Assessment, the Department of Planning and Analysis, and a Senior

Manager who reported directly to the district's Chief Operating Officer. In accordance with district policy, the Director of Planning and Analysis provided an official letter of permission to the researcher. The Director of Assessment and Research identified a survey technician in the department to assist with the survey production and the scanning of results. The Senior Manager in the Operations department provided additional consent as she was coordinating a project to redesign the district's current parent satisfaction survey. The researcher also had an opportunity to brief the Superintendent directly.

Research Design

The research design for this study was a mixed method structure intended to collect both quantitative and qualitative data. As Creswell (2003) suggests, the mixed method approach allows "field methods such as observations and interviews (qualitative data) to be combined with traditional surveys (quantitative data)" (p. 15). Creswell (2003) continues by stating, "all methods have limitations but the biases inherent in any single method, could be neutralized by combining data sources from two different methods" (p.15). By blending these elements, one method can inform the other (Creswell, 2003 p.16).

Additionally, this research design was selected as it presented a way for the researcher to examine the problem in a manner that would incorporate both fact and opinion. Through the analysis of the quantitative survey results, the researcher was able to identify areas for exploration with the principals during the

qualitative interview component. The researcher determined that results from both methods would provide information about what parents deem important and how the principals interpret this information. The combination of these perspectives would then provide greater clarity in order to make recommendations to the field of educational leadership and help guide principals' school improvement efforts.

Qualitative Design

Qualitative data was collected from principals at the participating schools through a two-part interview. The purpose of these interviews was to learn about how principals access feedback from parents and what they do with this information. The principal at each of the schools participated in one 45-minute interview prior to the administration of the survey and a second interview after the survey data had been compiled and analyzed. Both of the interviews were tape-recorded and the researcher transcribed and coded the responses for analysis of themes. The questions for each of the interviews were as follows.

Principal Interview #1

The first interview was comprised of five questions and was conducted prior to the survey administration. The questions focused on how the principals gather information or feedback from parents, what they do with this information and what additional information they would like to know. The researcher asked the following questions for this initial interview:

1. How do you gather feedback from parents about what matters to them?

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2. How do you use this information?

3. What would you like to know from parents?

4. What additional information would be helpful?

5. Describe the importance of feedback from parents.

Principal Interview #2

The researcher conducted a second 45-minute interview after the surveys were collected and the data was analyzed and presented to the principals. The purpose of the second interview was to determine if the information made available through the survey was helpful and if it could be used to inform school improvement plans. The questions posed to the principals at the second interview included:

1. What does this data tell you about your school?

2. How do these results influence your thinking about dealing with parents?

3. What questions do you have?

4. What suggestions do you have about the parent satisfaction process?

Quantitative Design

Quantitative data was collected from parents in the form of a satisfaction survey modeled after the SERVQUAL tool developed by Parasuraman, Ziethaml, and Berry (1985). The researcher designed the survey (see Appendix B) to measure school satisfaction and performance in relation to the five service quality dimensions and was comprised of 6 demographic questions and 22 indicator

statements. Respondents were asked to rate how important each statement was to them personally and to rate the level of performance provided at their child's school in relation to the specific indicators. Respondents rated each of the 22 indicators twice using a 4-point Likert-type rating scale.

Survey Design

Surveys are a common tool to measure parent satisfaction. This method is favored because it provides an efficient way for parents to anonymously report their experiences at a given school. While other research designs such as focus groups can provide valuable information, they can be time intensive and intimidating. As such, the research design for this study incorporated the development and administration of survey designed to measure parent satisfaction as related to the five service quality dimensions.

The researcher based the survey used in this study (see Appendix B) on several different surveys designed to measure either service quality or school satisfaction. The researcher reviewed a variety of surveys for content, phrasing and ordering of questions, and layout (Cohen and Wunder, (2007), Wunder, (1997) and Suba, (1997)). Upon examining these examples, the researcher decided to divide the survey used in this study into two sections. The first section of the survey included six questions to collect demographic information and the second section focused on measurement of the service quality dimensions.

The original 22-item SERVQUAL survey developed by Parasuraman, Zeithaml and Berry (1985) and the most recent version of the parent satisfaction survey used by Denver Public Schools (DPS) served as the main structure of the survey. A list of possible survey questions was generated and the researcher assigned the questions to five groups aligned with the service quality dimensions including Reliability, Assurance, Tangibles, Empathy and Responsiveness (see Attachment A). The acronym "RATER," (Buttle, 1996) is helpful in recalling the order of the dimensions as noted in these tables. Dimension 1 refers to Reliability, Dimension 2 refers to Assurance, Dimension 3 refers to Tangibles, Dimension 4 refers to Empathy and Dimension 5 refers to Responsiveness (see Attachment A).

A focus group of elementary principals from DPS reviewed the list of possible questions for the service quality dimensions and selected an equal number of questions for each category to be included on the survey. Each service quality dimension had four questions except for the Responsiveness dimension that contained six questions. The final list included 22 items. As recommended by Parasuraman et al (1985), the wording for each of the survey items was modified to reflect the educational context. A description of the Service Quality Dimensions and the accompanying questions follows:

- Reliability – 4 items measured the school's ability to perform the promised service dependably and accurately (Questions 3, 5, 6, 8).

- Assurance – 4 items measured the knowledge and courtesy of employees and their ability to inspire trust and confidence (Questions 2, 7, 9, 10).

- Tangibles – 4 items measured the physical attributes and communication materials (Questions 1, 11, 13, 15).

- Empathy – 4 items measured the school's ability to provide caring, individualized attention (Questions 4, 16, 19, 22).

- Responsiveness - 6 items measured the school's willingness to help customers provide prompt, individualized service (Questions 12, 14, 17, 18, 20, 21).

The survey (see Attachment B) elicited two responses using a four-point Likert-type rating scale to measure each of the attributes – one for the level of importance and another for the perceived level of performance. The survey layout allowed for dual-entry so that parents could indicate both responses to the attribute statements on a single page.

<center><i>Field Test</i></center>

Two independent translators translated the survey into Spanish. Both versions were presented to a group of 4 native Spanish-speaking parents at a school that did not participate in the study. The parents evaluated the translations for accuracy and provided feedback regarding the overall layout of the survey.

A group of nine parents at another DPS elementary school that was not participating in the study field tested the English version of the survey. Parents were invited to provide feedback about ways to improve the survey directions, questions and layout. The parents offered no recommendations and reported that the survey directions, statements, questions and layout were clear.

Consent & Confidentiality

Consent for this study was obtained by submitting a written request to the Director of Denver Public School's Department of Planning and Analysis. Written approval was received prior to the completion of any research. Permission to conduct the surveys at the four schools was received from each of the school principals. A copy of this consent form is available in Appendix C. Informed consent forms were provided to all parents and can be viewed in Appendix D.

By collecting anonymous surveys on a voluntary basis, the identity of survey respondents was not known. Each school was provided with a collection box to collect surveys in a central, secure location. At the end of the survey administration window, the researcher collected all completed surveys from the schools and delivered them to the district's test processing center for scanning. Once all surveys had been scanned, the researcher retrieved the surveys and data files from the processing center and stored them in a secure location at her home. The survey results were compiled and shared with the principals and district administration in both an aggregated and disaggregated format. It was made clear

through the informed consent documents that the schools would only be identified by assigned number and that survey results would not be used for the purposes of administrator evaluation.

Survey Distribution

To ensure that only one survey per family was completed, data from the district's student information system was used to identify the oldest or only child attending each school. This number is reflected in the Families column of Table 3 and was used to determine the actual number of surveys issued. While the required sample size for each of the schools was slightly less than the number of families attending the school, surveys were given to all students in the oldest or only child category to achieve as high a response rate as possible.

Survey Administration

A survey package including a student notice, an overview letter, an informed consent document and a survey was provided to the oldest or only child at each of the four schools. The contents of the package were available in both English and Spanish.

The researcher distributed the survey packages to students in all four schools at the same time. The student notice informed students that if they returned a completed survey to the school by the specified date, they would receive a small prize (i.e. a keychain). The researcher returned to each school at the end of the week to distribute prizes and collect surveys.

The quantitative data for this study was collected in the form of a paper survey. The district offered their data system to produce and scan the surveys and to collate the survey data. As such, the researcher had to use district's scoring protocol that assigns a value of 0, 1, 2, or 3 points to each descriptor category. Table 4 describes the allocation of points for each question.

Table 4

Point Values for Importance and Performance Rating Scale

Importance Descriptors	Performance Descriptors	Assigned Value
Extremely Important	Excellent	0
Very Important	Good	1
Somewhat Important	Fair	2
Not Important	Poor	3

In this instance, the values were assigned in reverse order with higher scores being assigned to the lower performance descriptors. Therefore, with the results for this survey, as the values increase, the level of importance or performance decreases.

The district's test processing center scanned the completed surveys and transferred the results to a single Microsoft Excel data file. This file contained the coded responses based on the district's scoring protocols and assigned values. This data was imported into SPSS to conduct further statistical analyses.

A variety of descriptive analyses were conducted to describe the aggregated and disaggregated data sets. Comparative analyses including t-tests and ANOVAs were calculated for the aggregated data sample and disaggregated by school, ethnicity, income level and grade level. These tests were done to examine importance and performance ratings by service quality dimension. The mean scores for importance and performance were also graphed to provide a visual representation of the data for principals.

The researcher conducted interviews with the principals of the participating schools before and after survey administration to collect the qualitative data. The interviews were audio-recorded and then transcribed by the researcher. The transcripts were reviewed and coded for emerging themes.

Summary

As this chapter presents, a mixed method research design was used to investigate the research questions for this study. Creswell (2003) notes that this form of research poses challenges for the researcher in that it can be time intensive due to the need to analyze both text and numeric data (p. 210). However, by investigating the problem from both quantitative and qualitative perspectives, the researcher is offered an opportunity to more fully examine the problem. The descriptive, comparative and qualitative data collected for this study is presented and reviewed in Chapters 4 and 5.

Chapter 4

Results

Introduction

The information contained in this chapter examines the findings in relation

to the study's research questions:

1. Are service-quality dimensions important to parents? Is there a

   statistically significant difference between the importance and

   performance ratings of the service quality dimensions identified by

   parents as being important and do these ratings vary by school or

   demographic variable category (i.e. ethnicity, socio-economic status)?

2. Is there relationship between the level of importance assigned by

   parents to the service quality dimensions and the perceived levels of

   performance at each of the schools in the study?

3. What are principals' perceptions of the usefulness of this survey's

   results in guiding school improvement efforts?

Given the design of the study and the structure of the survey, this chapter

is arranged in three sections to present the survey findings about the relative

importance of service quality dimensions as they relate to parent satisfaction, to

examine the correlation between the importance and performance ratings of

service quality indicators as specified by parents and to share the perspectives of principals regarding the importance of parent feedback and the usefulness of the survey results.

The first section provides a description of the survey sample complete with a report of the descriptive statistics of the survey respondents. A presentation of demographic data by individual school is also in this section. The second section of this chapter provides the results of an analysis of variance of the various service quality indicator statements and dimensions in relation to importance and performance in a variety of manners in addition to a correlation analysis of the demographic variables. The third and final section of the chapter presents the qualitative findings of the study through an examination of the interviews conducted with the principals of the four schools before and after survey administration.

Much of the survey data examined in this chapter is presented in an aggregated format that includes data collected from all four schools included in the study. There were three primary reasons for making this decision. First, the results of the aggregated sample provided a better representation of the demographic variables than did the individual schools. Second, the pattern of results revealed by the raw test of means for each of the four schools was nearly identical to the results for the aggregated sample. In instances where the disaggregated data demonstrated different findings, an analysis of the results for

that specific test is presented. Third, by using the entire aggregated sample, the test results were more powerful given the larger sample size.

Description of the Sample

After a thorough examination of demographic information for elementary schools across the entire district, the researcher identified a purposive sample of four schools with moderate free and reduced lunch percentages between 40% and 67%. The schools also had similar demographic breakdowns with comparable percentages of minority students ranging between 46.1% and 69.2%, English Language Learners ranging between 11.5% and 15.6% and Special Education students ranging between 7.9% and 22.6%. Table 5 displays the specific demographic detail of each school.

Table 5

Demographic breakdown of participating schools

School	Enrollment	Families[a]	FRL %	Minority %	ELL[b] %	Special Ed %
1	586	460	46.6	69.2	11.5	10.5
2	474	296	42.6	46.1	14.2	7.9
3	353	211	67.1	56.6	12.9	22.6
4	354	284	40.0	46.5	15.6	14.6

Note. To preserve the anonymity of study participants, schools were referenced by number. [a]This number reflects the number of families attending each school to provide one survey per family. [b]English Language Learners

By identifying schools that had moderate free and reduced lunch percentages, the researcher was able to increase the likelihood that a variety of income levels would be represented in the survey. The similarity of demographic breakdown for minority students, English Language Learners, and Special Education students also helped minimize the likelihood of impact from undetermined confounding variables.

The researcher contacted the principal of each school approximately one month prior to survey administration and described the study. Principals were asked if they would consider participating in the study. All four principals chose to participate and signed the consent forms.

A total of 1,241 surveys were distributed to all families at each of the four schools. Because only one survey was distributed per family, the number of surveys distributed is lower than the actual student enrollment at the school. This accounts for the removal of siblings. As noted in Table 6, 846 completed surveys were returned for an overall response rate of 68.2%. The individual response rate for each of the participating schools is noted in Table 6.

Table 6

Survey distribution and response rates

School	Enrollment	Surveys Distributed	Surveys Completed	Response Rate %	% of Surveys Represented in Study
1	586	460	343	74.6	40.5
2	474	286	174	60.8	20.6
3	353	211	133	63.0	15.7
4	354	284	196	69.0	23.2
Total	1767	1241	846	68.2	100

Note. Schools are referred to only by number to preserve the anonymity of study participants. Only one survey per family was provided.

Due to the difference in size of the various schools and the number of families attending a school, a different number of surveys were distributed at each school. The participation rates at each school also varied and this had an impact on the percentage of surveys that were contributed by each school to the overall study. The response rates at each school ranged between 60.8% and 74.6%. This 15% difference may be related to the fact that in addition to the incentives offered to students for returning a completed survey, some principals provided students and teachers with daily reminders to turn in completed surveys or included written reminders to parents in the weekly parent newsletter or school folder.

School 1 had the largest enrollment, the highest number of surveys distributed and the highest response rate. During the post interview, the principal

shared that they typically see a high response rate from parents to items such as surveys, sign-up sheets and other materials sent home requiring a response. She wasn't sure if this was due to the fact that the teachers were diligent with their reminders or if parents were more attentive. School 2 had the second highest enrollment but the number of families and surveys distributed was comparable to School 4. This was due to the fact that a higher number of siblings attended School 2, which in turn reduced the number of surveys distributed. School 2 had the lowest response rate of 60.8% for undetermined reasons. School 4 had a higher response rate of 69%. Schools 3 and 4 had nearly identical enrollment sizes but School 3 had significantly fewer surveys distributed. Again, this was due to the fact that there were more siblings attending the school and this resulted in a lower number of families and surveys being distributed. The response rate at School 3 was 63%. It should be noted that all four schools had higher response rates for this survey than they did for parent satisfaction survey that was issued in the spring of 2008. Table 7 displays the school enrollment and number of surveys completed for the 2007-2008 and 2008-2009 school years.

Table 7

2007-2008 Parent Satisfaction Survey Response Rates

	District Surveys		Research Study	
School	2007-2008 Enrollment	# of Surveys Returned	2008-2009 Enrollment	# of Surveys Returned
1	581	53	586	343
2	458	119	474	174
3	389	107	353	133
4	288	89	354	196
Total	1767	846	1767	846

The higher number of surveys returned for this study may be related to the fact that students were offered an incentive and that surveys were to be returned to the school directly. The district issued survey is sent home with students but is to be returned via mail to the district office. No incentives are provided for completing the district survey. A second point of consideration is the fact that School 1 had a very large increase in the number of surveys returned for this study. In light of the principal's comments regarding parents willingness to complete forms and provide feedback, this result was surprising but reasons for the discrepancy, other than those stated above, could not be identified.

Survey Results

Part 1: Demographic Variables

Part 1 of the survey was comprised of six questions designed to collect data on the demographic variables (i.e. ethnicity, socio-economic status, grade level and school choice status) for each survey respondent. The descriptive data pertaining to each of the six demographic questions are presented in the following paragraphs.

Ethnicity

A disaggregated breakdown of the ethnicities by school is presented in Table 8. This data displays that there was a similar number of African American, Asian, Hispanic and White families across the four schools. While two of the schools may have had lower percentages for a specific ethnicity, it was off-set by the other two schools that both had higher and similar percentages for the same ethnicity. For example, Schools 1 and 3 had virtually no African American families while Schools 2 and 4 had similar percentages of African American families (i.e. 17.8% and 11.7%). Schools 2 and 4 had identical percentages of Hispanic students (i.e. 13.8%) and Schools 1 and 3 had a similar percentage of Hispanic students (i.e. 50.7% and 55.6%). In the white category, Schools 1 and 3 had similar rates of 24.2% and 19.5% and Schools 2 and 4 had very similar percentages of 55.7 and 56.1.

Table 8

Ethnicity by school

	School 1		School 2		School 3		School 4	
Ethnicity	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
African American	2	0.6	31	17.8	0	0.0	23	11.7
American Indian	7	2.0	1	0.6	1	0.8	0	0.0
Asian	25	7.3	4	2.3	8	6.0	5	2.6
Hispanic	174	50.7	24	13.8	74	55.6	27	13.8
Unidentified	45	13.1	14	8.0	18	13.5	22	11.2
White	83	24.2	97	55.7	26	19.5	110	56.1
Total	343	100.0	174	100.0	133	100.0	196	100.0

These schools were chosen because individually they met the goals for the purposive sample by having a more heterogeneous student population than is evident at most DPS elementary schools. Additionally, by pulling the schools together for the aggregated sample, the researcher was able to make sure that there was an acceptable level of distribution and sufficient representation of each demographic category.

Figure 2 displays the ethnicities of the overall sample. It should be noted that 11.7% of the survey respondents did not identify an ethnicity and 3% were coded as "Multiethnic."
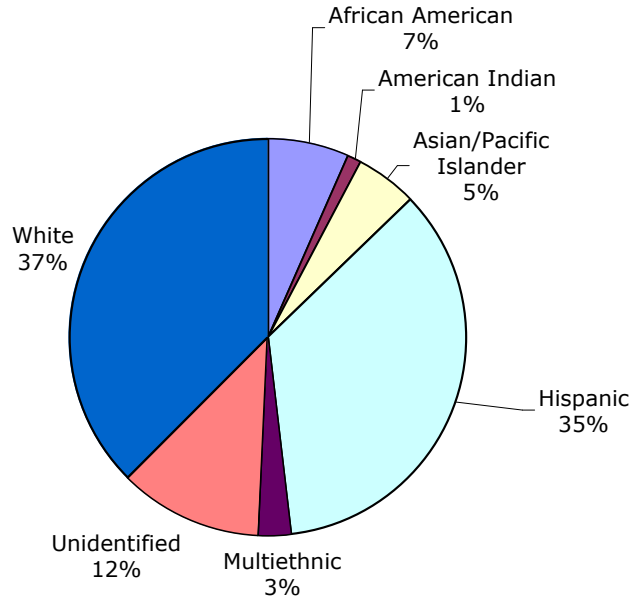
Figure 2. Ethnicity of aggregated sample.

<p style="text-align:center">*Socioeconomic Status*</p>

The income levels as reported by the survey respondents for the individual schools are presented in Table 9. From this data it can be noted that every income level was represented at each school. Approximately 50% of the respondents at Schools 1, 3 and 4 made $50,000 or less. School 2 had the highest average socioeconomic status with approximately 50% of the respondents earning more than $75,000. School 4 also had the highest percentage (34.5%) of respondents in the highest income category of "More than $100,000."

Table 9

Income Level by school

	School 1		School 2		School 3		School 4	
Income	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
$0-$24,999	66	19.2	29	16.7	42	31.6	48	24.5
$25,000-$49,999	111	32.4	22	12.6	42	31.6	38	19.4
$50,000-$74,999	73	21.3	13	7.5	21	15.8	27	13.8
$75,000-$100,000	44	12.8	26	14.9	3	2.3	25	12.8
More than $100,000	13	3.8	60	34.5	3	2.3	37	18.9
Not Reported	36	10.5	24	13.8	22	16.5	21	10.7
Total	343	100.0	174	100.0	133	100.0	196	100.0

The income levels for the aggregated sample are displayed in Figure 3.

Approximately 47% of the survey respondents reported an income level between

$0-$49,999 and 40% reported an income of more than $50,000. From the overall

sample, 12.2% did not report an income level. The distribution of income levels

across the entire sample is relatively even.

Figure 3. Income levels of aggregated sample.

The grade level breakdown of the school subgroups and the overall sample is depicted in Table 10. It should be noted that the total number of students for all grade levels combined, across all schools (i.e. 1,041), exceeds the total number of surveys collected (i.e. 846). This is due to the fact that some families had more than one child attending a school but were only asked to complete one survey per family. There was an even distribution of students across the various grade levels. Parents of students in the primary grades (i.e. ECE-2nd grade) completed 53% of the surveys. The remaining 47% of the surveys were completed by parents of intermediate students (i.e. 3rd-5th grade).

Table 10

Grade Level Distribution of Survey Respondents

School	ECE	K	1st Grade	2nd Grade	3rd Grade	4th Grade	5th Grade	Total Students	Total Surveys
1	22	52	51	73	68	85	80	431	343
2	15	37	38	40	49	24	21	224	174
3	19	12	26	21	34	21	25	158	133
4	29	44	45	32	29	35	14	228	196
Total	85	145	160	166	180	165	140	1041	846

School of Choice Status

The school of choice status is represented by the number of respondents who reported that the school their child (or children) attends is their assigned neighborhood school. In Figure 4, the choice status for each school is displayed. At Schools 1, 2 and 4, the majority of respondents reported they were attending their neighborhood school. School 2 had the lowest percentage of choice students. At School 3 the percentage of students who were attending from the neighborhood was the same as those attending on choice.
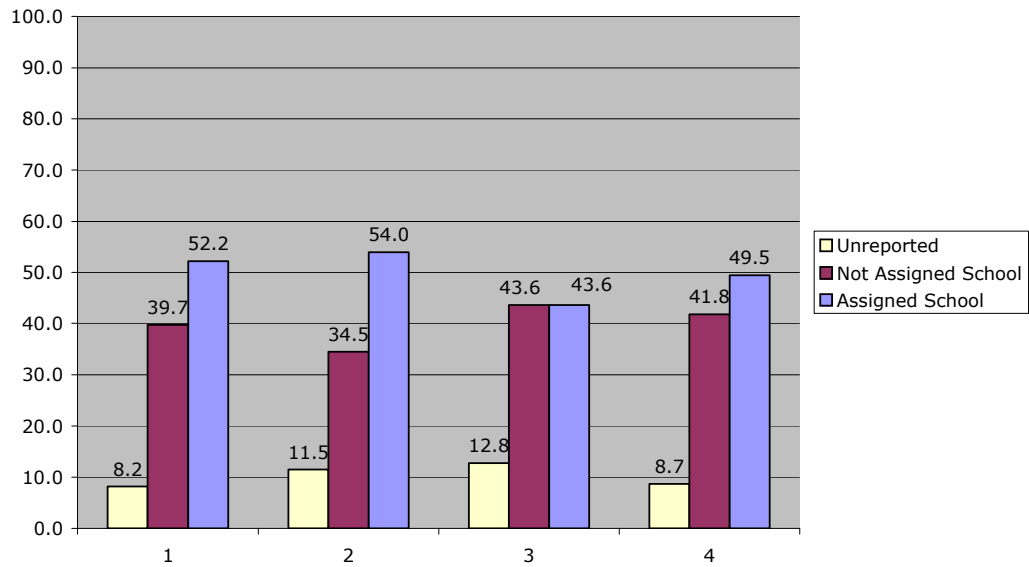
Figure 4. Neighborhood school status for individual schools

As depicted in Figure 5, the number of students from the overall sample that attend their assigned school was 50.6% while the number who attend on choice status was 39.7% and 9.7% of survey respondents did not provide a response.
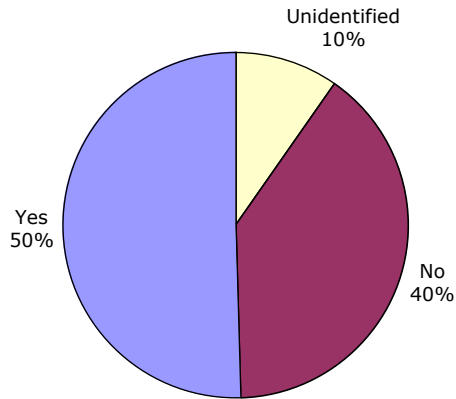
Figure 5. Attending neighborhood school for aggregated sample.

Figure 6 provides a disaggregated view of school choice status by income level. At all income levels except $74,999-$100,000, the majority of respondents were attending their assigned neighborhood schools.
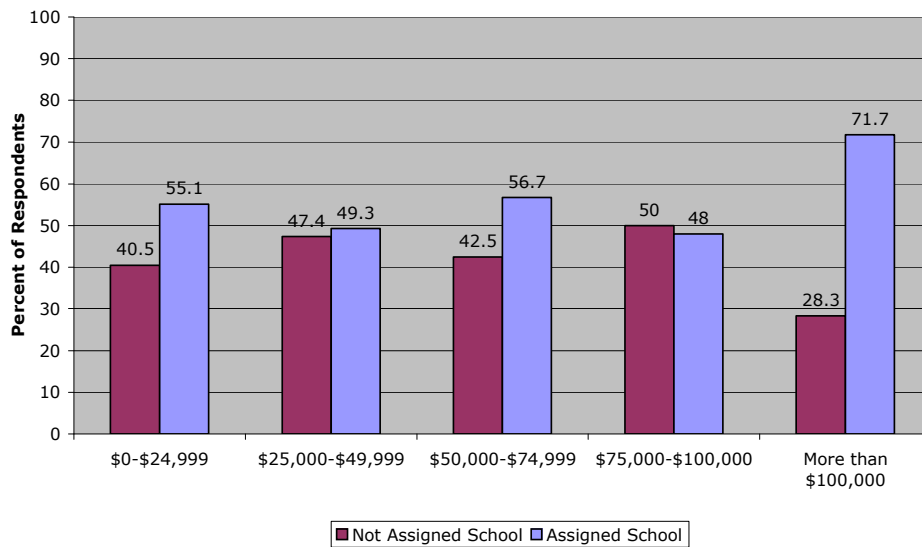
Figure 6. School choice status disaggregated by income level.

As noted in Figure 7, 96.6% of the survey respondents attended fewer than three schools.
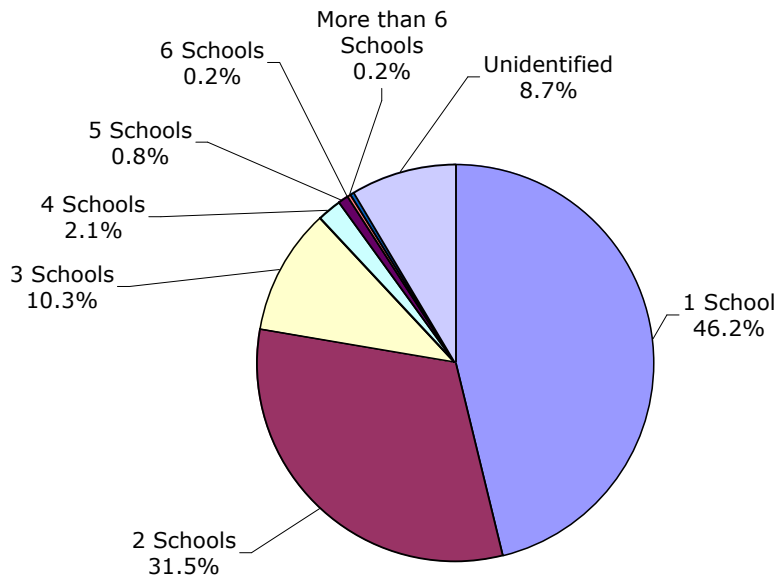
Figure 7. Number of schools attended for entire sample.

Reasons for Attending More than One School

Question 6 of Part One on the survey was included as a supplement to the question of how many schools had a child attended and only respondents who reported having attended more than one school were asked to respond. In Figure 8, the 36% who did not respond to this question may be comprised of respondents who only attended one school or those who did not select a reason.

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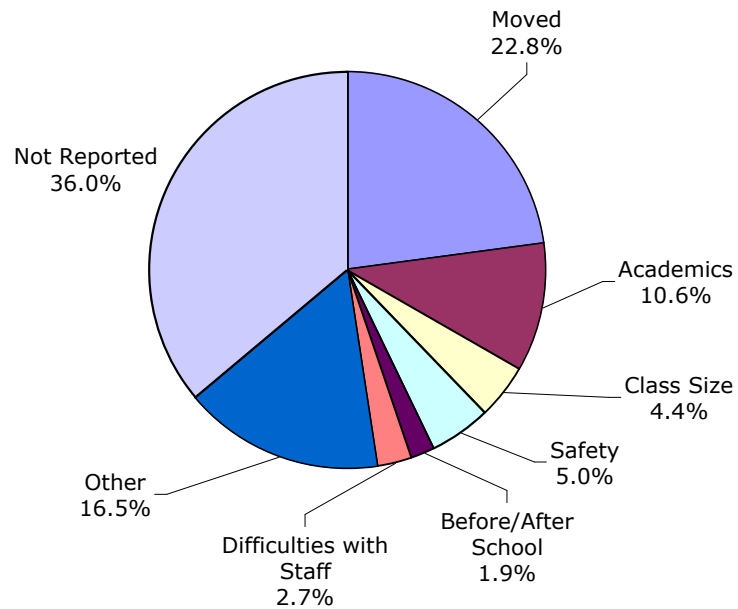
Figure 8. Reasons for attending more than one school for aggregated sample.

Survey Results

Part 2: Service Quality

Part 2 of the survey contained a series of 22 service quality statements that reflect the five Service Quality Dimensions of Reliability, Assurance, Tangibles, Empathy and Responsiveness (Parasuraman, Zeithaml and Berry, 1985). The service quality statements were designed to be neutral statements reflective of each Service Quality Dimension and were derived from the original SERVQUAL survey (Parasuraman, Zeithaml and Berry, 1985) and the dissertation work of William Wunder (1997). Each Service Quality Dimension included four questions with the exception of Responsiveness which had six questions. Table 11 demonstrates the distribution of questions across the Service Quality Dimensions.

Table 11

Distribution of Survey Questions by Service Quality Dimension

Dimension	Definition	Survey Questions
1 Reliability	Measures the school's ability to perform the promised service dependably and accurately (includes academic program, student achievement, Collaborative School Committee	3, 5, 6, 8
2 Assurance	Measures the knowledge and courtesy of employees and their ability to inspire trust and confidence (includes safety, class size, leadership)	2, 7, 9, 10
3 Tangibles	Measures the school's physical attributes and communication materials (includes appearance of building, materials, environment)	1, 11, 13, 15
4 Empathy	Measures the school's ability to provide caring, individualized attention (respect, tolerance, feelings about school)	4, 16, 19, 22
5 Responsiveness	Measures the school's willingness to help customers provide prompt, individualized service (attention to individual needs, parent requests)	12, 14, 17, 18, 20, 21

Respondents were asked to rate each statement twice – once for the level of importance they assigned to each statement and again for the level of performance their child's school provided in relation to the statement. A four-point Likert-type scale was used for both ratings with the descriptors for the importance category being extremely important, very important, somewhat important or not important and the descriptors for the performance category being excellent, good, fair or poor.

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This study was conducted in the Denver Public School district and the researcher worked with the district's Department of Assessment and Research to ensure that the district's research protocols were used. The district offered their data system to produce the surveys and collate the survey data. As such, the researcher had to use their scoring protocol. For the purpose of data analysis, it is important to note that the scoring protocol used in Denver Public Schools, assigned a value of 0, 1, 2, or 3 points to each descriptor category. Table 12 describes the allocation of points for each descriptor.

Table 12

Point Values for Importance and Performance Rating Scale

Importance Descriptors	Performance Descriptors	Assigned Value
Extremely Important	Excellent	0
Very Important	Good	1
Somewhat Important	Fair	2
Not Important	Poor	3

In this instance, the values are assigned in reverse order with higher scores being assigned to the lower performance descriptors. Therefore, with the results for this survey, as the values increase, the level of importance or performance decreases.

Analysis of Service Quality Dimensions

In response to the study's first and second research questions pertaining to which of the five service quality dimensions mattered most to parents and the relationship between their assigned levels of importance and perceived levels performance, a series of statistical tests including one-way ANOVAs were conducted. These tests were conducted for the aggregated sample as well as the various demographic variables (i.e. by ethnicity and income level), The results of these tests are described in this section.

Table 13, 14, 15, 16, 17 and 18 examine the survey responses by service quality dimension. As previously stated, each dimension was comprised of four to six questions. The tables refer to the specific dimensions by number but the researcher's presentation of the findings uses the actual names of each dimension. These include Reliability, Assurance, Tangibles, Empathy and Responsiveness. The results examined in this section compare the responses of several questions combined into one of five service quality dimensions.

Table 13 compares the mean values for importance and performance for each service quality dimension. The mean values for performance are lower than all mean values for importance. This indicates that overall, the parental perception of school performance in each of the service quality dimensions is lower than parents' stated levels of importance for all schools combined as well as for each individual schools.

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Table 13

Comparison of Mean Values for Service Quality Dimensions

Dimension	Importance Mean	Performance Mean	*t*	*df*	*p*
1	0.68	0.868	-7.674	1559	<.001
2	0.382	0.672	1543.14	1448.65	<.001
3	0.544	0.74	-7.37	1569	<.001
4	0.417	0.712	-10.351	1472.95	<.001
5	0.556	0.814	-10.207	1509.72	<.001

In order to determine which of the five service quality dimensions had the highest level of importance or performance for each demographic group (i.e. by all schools combined, ethnicity, and income level), a series of one-way ANOVAs were conducted. Table 14 displays the results for the aggregated sample with all schools combined.

Table 14

Analysis of Variance for Importance and Performance by All Schools Combined

	Importance				Performance		
Dimension	N	Mean	Std. Deviation	Dimension	N	Mean	Std. Deviation
2	779	0.382	0.377	4	787	0.672	0.547
4	782	0.417	0.419	3	788	0.712	0.465
3	783	0.544	0.435	2	786	0.740	0.508
5	768	0.556	0.457	5	775	0.814	0.534
1	780	0.680	0.482	1	781	0.868	0.483

In Table 14 the service quality dimensions appear in rank order from most to least important and from highest to lowest performance. For importance there was a significant difference among the five dimensions, $F_{(4, 3887)} = 58.624$, $p < .001$. Games-Howell post-hoc tests demonstrate that for importance Dimension 2 (Assurance) was most important and Dimension 1 (Reliability) was least important. All dimensions were significantly different from each other except for Dimensions 2 (Assurance) and 4 (Empathy) and Dimensions 3 (Tangibles) and 5 (Responsiveness), $p < .001$.

Parental perception of school performance, showed there was also significant difference among the five dimensions, $F_{(4, 3912)} = 18.984$, $p < .001$. Dimensions 4, 3, and 2 (Empathy, Tangibles and Assurance) were significantly higher than Dimensions 1 and 5 (Reliability and Responsiveness), $p < .05$. There was no significant difference between Dimensions 4 (Empathy), 3 (Tangibles), and 2 (Assurance) or between Dimensions 1 (Reliability) and 5 (Responsiveness).

Table 15 displays the ANOVA results for the respondents various ethnicities. For the importance ratings, Dimensions 2 (Assurance), 3 (Tangibles), and 4 (Empathy were significantly higher than Dimension 1 (Reliability) for the Hispanic and White ethnicity groups, $p < .05$. Dimension 5 (Responsiveness) was only significant from Dimension 4 (Empathy). The test results show that a significant difference exists in the importance rating for the African American

ethnicity but a Post-Hoc test of Multiple Comparisons could not determine which dimension was significantly different from other dimensions.

For the performance ratings, the Hispanic and White ethnicity groups had higher performance in Dimensions 2 (Assurance), 3 (Tangibles), and 4 (Empathy) than Dimension 1 (Reliability), $p < .05$, but no significant difference existed amongst Dimensions 3 (Tangibles) and 4 (Empathy). Dimension 4 (Empathy) had significantly better performance than Dimension 5 (Responsiveness). The ANOVA results indicated a significant difference existed in the importance ratings for the African American category but again, a Post-Hoc test of Multiple Comparisons failed to identify which dimension was significantly different from the others.

Table 15

Analysis of Variance for Importance and Performance by Ethnicity

Ethnicity	Importance				Performance			
	Dimension	N	Mean	Std. Deviation	Dimension	N	Mean	Std. Deviation
Unidentified	4	48	0.358	0.449	4	48	0.358	0.449
	2	45	0.361	0.439	2	45	0.361	0.439
	5	45	0.411	0.516	5	45	0.411	0.516
	3	48	0.457	0.534	3	48	0.457	0.534
	1	46	0.620	0.438	1	46	0.620	0.438
American Indian	2	8	0.406	0.265	2	9	0.806	0.497
	4	9	0.556	0.429	3	9	0.861	0.639
	3	9	0.611	0.532	1	9	1.009	0.617
	5	9	0.741	0.596	4	9	1.019	0.880
	1	8	0.823	0.583	5	9	1.093	0.572
African American	4	56	0.330	0.370	3	55	0.600	0.450
	2	56	0.368	0.306	4	55	0.655	0.590
	5	55	0.482	0.431	2	55	0.711	0.525
	3	56	0.542	0.417	5	53	0.818	0.612
	1	56	0.644	0.481	1	55	0.873	0.495
Asian	4	41	0.476	0.396	4	41	0.724	0.561
	2	42	0.500	0.465	2	41	0.799	0.540
	3	41	0.659	0.499	3	40	0.819	0.525
	5	41	0.707	0.567	1	40	0.867	0.474
	1	42	0.778	0.760	5	40	0.900	0.556
Hispanic	2	287	0.386	0.398	4	292	0.697	0.539
	4	287	0.389	0.425	3	293	0.728	0.448
	5	284	0.516	0.472	2	292	0.745	0.517
	3	288	0.525	0.436	5	291	0.823	0.529
	1	287	0.595	0.473	1	290	0.880	0.501
White	2	316	0.373	0.346	4	316	0.604	0.490
	4	316	0.457	0.419	3	316	0.668	0.454
	3	316	0.561	0.409	2	316	0.705	0.470
	5	313	0.600	0.404	5	313	0.750	0.492
	1	316	0.765	0.433	1	315	0.828	0.455
Multiethnic	2	25	0.320	0.399	4	25	0.750	0.669
	4	25	0.400	0.415	2	25	0.760	0.481
	3	25	0.520	0.420	3	25	0.887	0.458
	5	21	0.552	0.524	1	25	0.897	0.492
	1	25	0.577	0.466	5	21	0.943	0.560

The ANOVA results for importance and performance of the various dimensions by income level are displayed in Table 16. In general, Dimensions 2 (Assurance) and 4 (Empathy) were most important while Dimension 1 (Reliability) was least important for all income groups. The ANOVA determined that Dimension 2 (Assurance) was significantly different from Dimensions 1 (Reliability), 3 (Tangibles), and 5 (Responsiveness) across almost all income groups except for Dimension 5 (Responsiveness) for the lowest income group, $p <$ .05. No significant difference was found Dimensions 2 (Assurance) and 4 (Empathy). Dimension 4 (Empathy) was also found to be significantly different from Dimension 1 (Reliability) across all income groups.

For the lowest income group, significant differences existed for importance between Dimensions 1 (Reliability) and 5 (Responsiveness), Dimensions 3 (Tangibles) and 4 (Empathy), and Dimensions 4 (Empathy) and 5 (Responsiveness). Significant differences between Dimensions 4 (Empathy) and 5 (Responsiveness) were also evident among the $25,000-$49,999 income group and the highest income group of more than $100,000.

No significant difference was found for performance among the various income groups. In general, Dimension 4 (Empathy) had the highest performance across all income groups except the $50,000-$74,999 range. Dimensions 1 (Reliability) and 5 (Responsiveness) had the lowest performance across all income groups except for the $75,000-$100,000 range. ANOVA tests did not

demonstrate a significant difference among all income groups and dimensions for performance.

Table 16

Analysis of Variance for Importance and Performance by Income Level

Income	Importance				Performance			
	Dimension	N	Mean	Std. Deviation	Dimension	N	Mean	Std. Deviation
$0-24,999	4	181	0.351	0.387	4	90	0.549	0.480
	2	182	0.400	0.390	3	90	0.597	0.421
	5	176	0.489	0.446	2	91	0.607	0.513
	3	181	0.546	0.441	5	90	0.666	0.500
	1	182	0.647	0.500	1	90	0.749	0.504
$25,000-$49,999	2	209	0.405	0.412	4	106	0.752	0.556
	4	209	0.440	0.457	2	105	0.794	0.545
	3	210	0.524	0.435	3	106	0.812	0.460
	5	207	0.580	0.502	5	105	0.895	0.544
	1	208	0.653	0.528	1	104	0.936	0.521
$50,000-$74,999	2	133	0.350	0.341	3	47	0.791	0.469
	4	134	0.407	0.391	2	47	0.840	0.530
	3	134	0.523	0.434	4	47	0.840	0.498
	5	133	0.536	0.445	5	46	0.940	0.487
	1	133	0.683	0.456	1	46	1.024	0.442
$75,000-$100,000	2	97	0.345	0.341	4	23	0.696	0.621
	4	97	0.425	0.399	3	23	0.739	0.423
	3	97	0.559	0.390	5	23	0.826	0.473
	5	95	0.569	0.408	2	23	0.859	0.412
	1	97	0.655	0.412	1	23	0.895	0.241
More than $100,000	2	113	0.364	0.336	4	15	0.650	0.533
	4	113	0.472	0.441	3	15	0.683	0.395
	3	113	0.580	0.432	2	15	0.750	0.390
	5	111	0.639	0.443	1	15	0.850	0.660
	1	113	0.815	0.402	5	15	0.942	0.614

The results reviewed in the following two sections relate to the study's third research question and focus on the principals' perceptions of the usefulness of the parent satisfaction survey results. Through the pre-interviews conducted with principals, it became apparent that one of the primary things principals hoped to learn through their participation in this study was how their individual schools were performing in relation to the various survey questions. After the data was analyzed and presented and during the post-interviews, the principals stated that the service quality dimension data was not as informative to them as the individual indicator statements because of the broad nature of the dimensions. The need to examine the data by individual indicator statement was further substantiated, due to the variability of ranking for each indicator statement within the five Service Quality Dimensions. Therefore, this section provides an analysis of the individual indicator statements and is followed by an examination of the interview responses.

Table 17 displays the mean value and standard deviation for each question in the survey in relation to importance and performance for the entire aggregated sample. The questions have been grouped into the five service quality dimensions. The accompanying numbers in the columns labeled "Rank" indicate where each question fell in relation to mean importance or performance rating.

Table 17

Mean Importance and Performance Ratings of Survey Questions by Dimension

Dimension	Question	Importance			Performance					
		Mean	Std. Deviation	Rank	Mean	Std. Deviation	Rank	t	df	p
Reliability	Q 3 - The school does what it says it will	0.420	0.556	7	0.72	0.646	10	-9.806	1474.106	.000
	Q 5 - High test scores	0.830	0.763	20	0.99	0.603	21	-4.522	1450.931	.000
	Q 6 - Strong academic program	0.390	0.586	5	0.81	0.678	14	-12.873	1518	.000
	Q 8 - Collaborative School Committee (CSC) process	1.100	0.772	22	0.95	0.63	19	3.836	1372.218	.000
Assurance	Q 2 - Class size	0.520	0.63	14	1.09	0.69	22	-16.866	1533.637	.000
	Q 7 - My child's safety at school	0.130	0.394	1	0.57	0.668	1	-15.949	1254.488	.000
	Q 9 - Effective principal leadership	0.440	0.571	9	0.67	0.701	8	-7.137	1460.623	.000
	Q10 - Feeling welcome at my child's school	0.420	0.57	8	0.62	0.746	4	-5.986	1444.196	.000
Tangibles	Q 1 - Well-maintained facilities	0.600	0.597	18	0.65	0.582	6	-1.459	1540	.145
	Q11 - Orderly, productive school environment	0.500	0.551	13	0.66	0.572	7	-5.482	1521	.000
	Q13 - School balances academics, art, music and P.E.	0.450	0.563	11	0.72	0.677	11	-8.381	1463.558	.000
	Q15 - Up-to-date equipment and classroom materials	0.608	17	17	0.621	15	15	-6.821	1506.929	.000
Empathy	Q 4 - My child likes going to school	0.340	0.552	2	0.60	0.69	2	-8.362	1453.561	.000
	Q16 - Comfort discussing child's needs with teachers and staff	0.529	3	3	0.715	5	5	-9.024	1392.593	.000
	Q19 - School respects cultural, religious and personal backgrounds of families	0.686	19	19	0.682	9	9	-2.763	1504.904	.006
	Q22 - School has a sincere interest in solving problems	0.410	0.565	6	0.77	0.736	13	-10.690	1411.798	.000
Responsiveness	Q12 - Parents/guardians kept informed	0.340	0.513	4	0.62	0.677	3	-8.962	1420.779	.000
	Q14 - Availability of staff when needed	0.550	0.602	15	0.74	0.671	12	-5.941	1506	.000
	Q17 - Individual attention provided to students	0.591	10	10	0.781	20	20	-14.797	1511	.000
	Q18 - Prompt response to parent requests	0.623	16	16	0.745	17	17	-7.946	1510	.000
	Q20 - Before and/or after school programs available	0.886	21	21	0.839	18	18	.682	1479.882	.495
	Q21 - Challenging work is provided in all classes	0.588	12	12	0.648	16	16	-10.372	1491.056	.000

Note: zf sig. Importance > Performance, Importance < Performance

Table 17 displays the results of a *t*-test for independent samples that was

conducted to determine if the difference between the means for the importance

ratings and the performance ratings for each of the 22 service quality indicator

statements were statistically significant. This was done to determine if there was a mismatch between parents stated levels of importance (i.e. what they desire and expect) versus their perceptions of performance or service provided at their child's school. Items 1 and 20 were not significant. Only performance for item 8 (CSC process) was rated significantly higher than importance. For the other 19 items the performance was significantly lower than the importance, $p < .001$.

Tables 18, 19 and 20 examine the quality indicator statements that were rated the most and least important by respondents across the various ethnicities, grade levels and income levels for the aggregated sample. For this analysis, only importance for the aggregated sample was considered. This was done because performance was related to individual school circumstances and could be influenced by a multitude of factors. Importance was a judgment related to parents' values and could be unrelated to school experience. A series of t-tests were completed to determine the rank order of the indicator statements. While not all results were statistically significant, the researcher decided it was important to share this information because the principals were concerned with what parents valued.

The top three questions for importance are presented from most to least important and the lowest three questions are ordered from least important to slightly more important. The questions are also color-coded by service quality

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dimension using the following key to demonstrate the importance rating by

dimension as well.

Table 18

Highest and Lowest Importance Questions by Ethnicity

Reliability

Assurance

Tangibles

Empathy

Responsiveness

	Rank	African American	American Indian	Asian	Hispanic	White	Multiethnic	Unidentified
Top 3 Quality Indicators Rated for Importance	1	Q 7	Q 7	Q 7	Q 7	Q 7	Q 7	Q 7
	2	Q 4	Q 4	Q 4	Q 12	Q 16	Q 3	Q 4
	3	Q 16	Q 12	Q 10	Q 16	Q 4	Q 6	Q 12
Lowest 3 Quality Indicators Rated for Importance	20	Q 5	Q 19	Q 5	Q 5	Q 5	Q 5	Q 20
	21	Q 20	Q 21	Q 8	Q 20	Q 20	Q 20	Q 5
	22	Q 8	Q 8	Q 8	Q 8	Q 8	Q 8	Q 8

Table 19

Highest and Lowest Importance Questions by Grade Level

	Rank	ECE	Kinder	1st Grade	2nd Grade	3rd Grade	4th Grade	5th Grade
Top 3 Quality Indicators Rated for Importance	1	Q 7	Q 7	Q 7	Q 7	Q 7	Q 7	Q 7
	2	Q 4	Q 4	Q 4	Q 22	Q 12	Q 12	Q 4
	3	Q 3	Q 16	Q 16	Q 12	Q 16	Q 16	Q 12
Lowest 3 Quality Indicators Rated for Importance	20	Q 5	Q 5	Q 5	Q 5	Q 5	Q 5	Q 5
	21	Q 20	Q 20	Q 20	Q 20	Q 20	Q 20	Q 20
	22	Q 8	Q 8	Q 8	Q 8	Q 8	Q 8	Q 8

Table 20

Highest and Lowest Importance Questions by Income Level

	Rank	$0-$24,999	$25,000-$49,999	$50,000-$74,999	$75,000-$100,000	More	Unidentified
Top 3 Quality Indicators Rated for Importance	1	Q 7	Q 7	Q 7	Q 7	Q 7	Q 7
	2	Q 4	Q 12	Q 4	Q 12	Q 4	Q 3
	3	Q 12	Q 16	Q 12	Q 6	Q 13	Q 6
Lowest 3 Quality Indicators Rated for Importance	20	Q 5	Q 5	Q 5	Q 5	Q 5	Q 5
	21	Q 20	Q 20	Q 20	Q 20	Q 20	Q 20
	22	Q 8	Q 8	Q 8	Q 8	Q 8	Q 8

Question 7 (Q7) regarding a child's safety at school was rated as the most important indicator for all groups. Questions 4 (My Child Likes Going to School) and 16 (Comfort Discussing Child's Needs with Teachers and Staff) also appeared multiple times as one of the top three indicators.

In all but two instances, the same three quality indicator statements – Question 8 (Collaborative School Committee), Question 20 (Before and After School Programs) and Question 5 (High Test Scores) - received the lowest ratings across all ethnicities, grade levels and income levels.

Interview Responses

The purpose of this section is to examine the qualitative component of this study designed to investigate the third research question focused on the usefulness of the survey results from the principal's perspective. In order to do so, the researcher conducted a two-part interview with the principal of each school. The first part of the interview occurred approximately two weeks prior to the survey

administration. The second interview occurred approximately six weeks after the survey was completed and the data was analyzed. The interview questions were as follows:

Principal Interview #1

1. How do you gather feedback from parents about what matters to them?

2. How do you use this information?

3. What would you like to know from parents?

4. What additional information would be helpful?

5. Describe the importance of feedback from parents.

Principal Interview #2

1. What does this data tell you about your school?

2. How do these results influence your thinking about dealing with parents?

3. What questions do you have?

4. What suggestions do you have about the parent satisfaction process?

Findings of First Interview

During the first meeting with the principals, the research study was described in detail, the survey and consent forms were reviewed and principals were provided with an opportunity to consent to the study. All principals signed the consent form and chose to continue with their school's participation. Each principal was asked to respond to a series of five questions. The interviews were audio recorded and then transcribed for analysis. The responses to these questions

are reviewed in the following paragraphs. In addition to the pre-defined research questions, the researcher asked clarifying questions as necessary. These questions and responses are also presented.

The principals had varying years of experience both as being a principal in general and in terms of how long they had been assigned to their schools. The principal of School 1 had been assigned to her school for twelve years and the principal at School 2 had been there for five years and served as an assistant principal for two years prior to that. The Principals at Schools 3 and 4 were both in their first year at each school but had varied levels of experience within the district. The principal at School 3 had been a program manager for a district department and this was her first assignment as principal. The principal at School 4 had been assigned to a different school as a principal for four years.

Pre-Survey Interview Question #1

How do you gather feedback from parents about what matters to them?

Responses to the first question indicated that principals gather feedback from parents in four different ways. All principals reported using the district's annually issued parent satisfaction survey as their primary method of formally collecting feedback from parents. They stated this tool allowed them to monitor levels of parent satisfaction over time. They also reported that the Collaborative School Committees (CSCs) and Parent Teacher Organizations serve a purpose in gathering feedback from parents and monitoring levels of concern or satisfaction

regarding specific topics and issues. All principals referred to the fact that informal conversations, e-mails and phone calls from parents also provide them with feedback from parents on a more regular basis. Additionally, two principals referred special monthly events such as breakfast or coffee with the principal where parents were invited to discuss issues with the principal in a less formal environment. The principals stated that meetings and conversations with parents provide principals with a mechanism to infer levels of parent satisfaction in relation to a variety of different factors.

Pre-Survey Interview, Question #2

How do you use this information?

In all instances, the principals stated that they used information provided by parents to inform policy changes and the decision making process at the school. The principal at School 2 commented that, "parent feedback guides me and my actions on a daily basis. I know if I don't listen, I'll end up with a big problem on my hands."

In three instances the principals discussed how they use parent feedback as a way to introduce topics of discussion or concern to teachers. One principal stated, "If I have heard a concern many times from a bunch of parents, it's probably an issue that we [the school] should consider." In one school the example that was provided was in relation to the use of televisions and videos in the classroom. In another school, the topic related to teacher attendance. In both

instances the principals discussed how the parent feedback was used to begin a conversation with the teachers and to make some decisions together about how they could attend to these parent concerns.

Finally, all four principals stated that parent feedback is incorporated into the school improvement planning process in some capacity and that it is often used to define agenda items for upcoming CSC meetings.

Pre-Survey Interview, Question #3

What would you like to know from parents?

Principals wanted to know several different things from parents. At School 1 and 2 both principals referred to the fact that safety is a large concern for parents and the community. They wanted to know if the efforts the schools were taking in relation to communicating about safety related items was having an impact and meeting parents expectations.

The principal at School 1 was also interested in learning more about parents' perceptions regarding communication. She stated, "parents don't like 'oh, by the ways' at the last minute." She was interested in "finding out how parents were feeling about the communication efforts from the school and how parents feel about sharing their thoughts and opinions with the school."

The principals at School 2 and School 4 were interested in learning whether or not parents feel welcome at their schools. They wanted to know if the

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parents felt their needs were met and if teachers and staff (i.e. secretaries) were approachable.

The principal at School 3 was most interested in learning more about school of choice issues and finding out what factors influence parents as they make decisions to transfer their students from school to school. She had noticed shifting enrollment trends and wanted to know if parents were making these decisions due to the academic program and grade levels currently available at her school or if other factors were at play.

All principals stated they were interested in learning about how parents felt about safety issues and instruction at their schools.

Pre-Survey Interview, Question #4

What additional information would be helpful?

This question resulted in a variety of responses. Two principals stated that they felt the questions asked on the district's school satisfaction survey needed be re-examined and that some thought should be given to what information is truly wanted from parents. One principal stated, "Questions about do you like this or that are very subjective and don't help the school focus on the big concepts that are important for our school improvement plans." She used the district's standards based progress report as an example and asked, "How do parents really feel about it, do they truly understand it and does it provide them with information they can use to help their children?"

Another principal shared her feelings that while having parent feedback is helpful and important, she is often left wanting more assistance from parents when it comes to finding solutions and implementing plans to address their concerns. Not only did she want to know about parents' concerns, she wanted input on how they might assist in addressing them. She stated, "Lots of parents have concerns or ideas, but the school needs their help with execution of plans so things are manageable."

In relation to the declining enrollment trend at School 3, the principal wanted further information not only about why students jump from school to school, but also, what would get a parent to stay at one school over time.

Pre-Survey Interview, Question #5

Describe the importance of feedback from parents?

In all instances, the principals echoed the response that feedback from parents was critical. They believed that parents must be kept informed about what was happening at school so that students are supported at home. To endorse this stance, the principals explained that they made themselves accessible to parents regularly throughout the day (i.e. at drop off and dismissal times, via phone and e-mail).

In one school where the principal had been in place for several years, she stated that it was her belief that as the level of diversity in the student population increased the levels of parent input and student achievement had decreased.

At another school where the principal reported that there was a high level of parent input and involvement the principal explained that while she believed communication to be key, negative feedback sometimes led to feelings of defensiveness. She stated that on certain occasions she needed to take extra time to reflect on the feedback in order to respond appropriately.

At Schools 3 and 4 both principals referred to the fact that parent feedback is important in terms of making program decisions and that as principals, they need to understand what parents considered to be the most important elements of a quality education. In one instance, the principal felt this information was critical as they attempt to increase enrollment and retain currently enrolled families. In the other instance, the principal was concerned that without paying attention to the parent feedback the school would be at risk of losing their status as a highly rated school on the Colorado School Accountability Report. She believed that the feedback was an important way of raising expectations with the staff and remaining focused on their mission.

Pre-Survey Interview Supplemental Question

Are results from the current School Satisfaction Survey presented in a manner that is helpful?

The principals provided a mixed response to this question. While they felt that the information was helpful, they stated that the manner in which the information was presented could be improved upon. They wanted more

information about which parents were responding to the survey to help them determine how representative the data was of their school population. They also stated that the data could be made more accessible by rank ordering questions in order of percentage of parents who strongly agreed or agreed with the survey statements.

Pre-Survey Interview Supplemental Question

If you had to estimate the level of parent satisfaction that exists in your school, would it be high, medium or low?

In all instances the principals responded that they believed there was a high level of parent satisfaction at their schools. One principal went on to state that she thought the level of satisfaction varied by grade level. For example, because the kindergarten classes at her school had thirty students in them, she anticipated that the levels of satisfaction amongst parents of kindergarten students might be lower than in other areas of the school.

Another principal wondered if the parents' levels of satisfaction were actually reflective of the school or more directly related to their own child's experience. Her sense was that if parents believed their child was doing well, their level of satisfaction with the school in general was positive. She was curious to know if parents refrained from commenting about things that may be of concern as long as the issue was not having an impact on their child.

What does customer service mean to you? Does it make sense in education?

All principals reported that customer service as being something they consider but may not have specifically addressed with their staffs. While they thought of students and parents as the customers they did not always think that teachers shared this perspective. One principal stated, "Some teachers think they are doing kids a favor by being here. While it's a noble profession [teaching], they need to shift their thinking. We all have to attend to customer service as teachers, principals, secretaries – customer service is critical – if everyone is grumpy, satisfaction decreases."

Findings of Second Interview

A second meeting and interview with the principals took place approximately six weeks after all surveys had been collected and the data had been collated and analyzed. During this meeting, principals were presented with a data package that included an overview of their parent satisfaction survey results from the 2007-2008 school year and a series of figures and tables that presented disaggregated data for each specific school in relation to both demographics and survey responses (see Appendix G).

The researcher had hoped to be able to provide principals with an Importance-Performance grid to visually display the relationship between the importance ratings assigned by parents and the performance of the schools in

relation to the 22 service quality indicator statements. The small differences

between the mean values for importance and performance for each of the

indicator statements and the difficulty in determining accuracy in the positioning

of the intersection for the vertical and horizontal axes made the creation of these

grids impossible. Principals received a visual comparison in the form of a bar

graph with the importance and performance ratings paired together for each

indicator statement. These graphs can be viewed in Appendix G.

A gap analysis of the differences between importance and performance

only presented small differences and did not prove to be as meaningful to the

principals as the ranking of questions by importance. For this reason, responses to

the questions for both importance and performance were presented to principals in

a rank-ordered format. In doing so, the principal was still able to compare

importance and performance but could also isolate which indicators were most

important to parents.

Two additional tables depicting aggregated data from all four schools were

included so that principals would be able to compare their individual school's

results with the study as a whole. These tables included the mean responses to

individual survey questions for both importance and performance and the ranking

of service quality dimensions for importance and performance.

Upon reviewing the data, the researcher ased the principals a series of four

questions. The responses to these questions are presented in the following

paragraphs. It should be noted that the responses provided by principals during the second round of interviews were not as detailed as those elicited during the first set of interviews. At the close of each final interview, all principals noted that they had not had enough time to fully reflect upon the data and that they would be better able to provide more detailed answers to the questions if they had more time.

Post-Survey Interview Question #1

What does this data tell you about your school?

The principal responses in relation to this question focused on the fact that the difference between the importance ratings and the performance ratings were the most intriguing and helpful in determining areas of strength and areas for improvement. While the principals stated that examining the gaps between importance and performance would be most helpful in defining next steps, upon initial review, they were most intrigued by the schools' performance ratings as assigned by parents. All principals stated that this information would be reviewed with their Collaborative School Committees (CSCs).

In two instances the principals commented that seeing the demographic breakdown of the survey respondents for their individual schools was helpful as this encouraged them to consider whether or not the voices of all parent groups were represented in the survey results. They stated they would use this

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information to consider different ways of reaching out to groups of parents that may have demonstrated lower response rates.

In all instances the principals were not surprised to see that the question related to children's safety while at school was rated by parents as being the most important but they were surprised to see that the question related to high test scores was rated so low.

Finally, all principals commented that while it was interesting to see the data arranged by importance and performance in relation to the five service quality dimensions, the most meaningful data for their needs was the breakdown by specific question.

Post-Survey Interview, Question #2

How do these results influence your thinking about dealing with parents?

In all instances, the principals commented that the survey results would help them address specific concerns or areas for improvement and that they would use this information to guide conversations with teachers and their CSC's. One principal commented that the results would be helpful in allowing her to better understand the parents' perspectives and to prioritize her efforts in attending to their needs. Another principal stated that since she was new to the school, this information would help her better understand the parents and their motives.

Three principals stated that they wanted to conduct further research with parents regarding questions that showed the largest discrepancies between importance and performance.

Post- Survey Interview, Question #3

What questions do you have?

All of the principals indicated that they needed more time to examine the data before they could identify additional questions. Follow-up contact was made by the researcher with the principals via e-mail but no further questions surfaced.

At the time of the final principal interviews, the district had just released its annual parent satisfaction survey. All principals stated that they were interested in comparing the results of the survey issued as a part of this study with the results of the district's survey. Unfortunately, the results from the district survey would not be available for several months.

Post-Survey Interview, Question #4

What suggestions do you have about the parent satisfaction survey process?

The responses to this question varied. In relation to the survey process, principals were most concerned with how to best retrieve parent input. They felt that sending the survey home with students and having them return it directly to the school for an incentive promoted higher response rates. However, they noted that there was no guarantee that the responses on the surveys came from the parents. One principal felt that offering an incentive promoted a higher return rate,

but that it came with complications in situations where one child in a family received the incentive and others did not. Two principals felt that the incentives did not really have matter.

Some of the suggestions made in response to this question focused on the technical components of the survey. In two instances, principals stated they would like to see a question about the parent's level of education added to the first section of the survey. Another principal stated she would like to see a section added to provide parents with an opportunity to share open-ended, written feedback.

Summary

The contents of this chapter provided a detailed examination and analyses of the quantitative and qualitative data collected at the four participating schools. The quantitative section included an overview of the demographic data describing the sample and a review of the aggregated and disaggregated statistical reports used to answer the research questions. The qualitative section presented the responses provided by principals to a series of questions posed during two different interviews. The implications of the findings presented in this chapter are discussed in further detail in Chapter 5.

Chapter 5

Summary, Discussion, Conclusions and Recommendations

Summary

Traditionally, schools have gathered data about parental satisfaction in an effort to gauge the overall climate of a school. With the increased prevalence of school choice and heightened levels of competition amongst schools for students, the importance of understanding the attitudes and opinions of parents is more important than ever before. Over time, school administrators have come to realize that when parents' expectations are not met or levels of satisfaction are low, they may be inclined to pursue educational opportunities elsewhere. Education has become the product and parents are the consumers. Therefore, it is incumbent upon school administrators to establish a clear understanding of what is important to their customers, the parents, and how they perceive a school's performance.

If school administrators fail to accurately identify and understand service quality and the indicators parents consider to be most important when they define school quality and satisfaction, they may overlook the need to attend to areas that if improved, could lead to higher levels of parent satisfaction, student enrollment and loyalty to the school. The practice of investigating customer perceptions about service quality has been an important element in the business world and

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may be of value as schools consider paths to improvement. Therefore, the purpose of this study was to learn more about what elements were most important to parents as well as their own levels of satisfaction with their children's school.

While considerable research related to service quality and customer satisfaction was available in the fields of business and marketing, only limited research with this focus had been conducted in the field of education. This study examined parental perceptions of service quality and school satisfaction the following research questions:

1. Are service-quality dimensions important to parents? Is there a statistically significant difference between the importance and performance ratings of the service quality dimensions identified by parents as being important and do these ratings vary by school or demographic variable category (i.e. ethnicity, socio-economic status)?

2. Is there a relationship between the level of importance assigned by parents to the service quality dimensions and the perceived levels of performance at each of the schools in the study?

3. What are principals' perceptions of the usefulness of this survey's results in guiding school improvement efforts?

This study used a mixed-method approach to examine parent perceptions of the importance and performance of the five service quality dimensions as defined by Parasuraman, Zeithaml, and Berry (1985). The quantitative component

of the study included a survey of over 800 parents from four elementary schools in an urban school district. The researcher designed the survey based on existing parent satisfaction and service quality surveys. It was conducted to retrieve information from parents related to both importance and performance regarding 22 service quality indicators that represented the five service quality dimensions: Reliability, Assurance, Tangibles, Empathy and Responsiveness. Upon completion of the survey, a variety of statistical tests were completed to determine the relative importance of the five service quality dimensions, analyze the relationship between the perceived levels of importance and performance of the service quality dimensions by parents, and investigate the influence of the demographic variables on the data.

The qualitative component of the study focused on the principals' perspectives and use of parental satisfaction data. Principals of the participating schools were interviewed prior to the survey administration and again after the survey results were calculated and analyzed.

The contents of this chapter include a summary of the major findings and discussion of how they pertain to each of the research questions, a review of the limitations of this research study, recommendations for future research and practice and conclusions.

Summary and Discussion of Major Findings

The survey results and interviews yielded a variety of findings that were helpful in addressing each of the study's research questions. The following sections present a discussion of the major findings.

Importance of Service Quality Dimensions

The survey data from the sample indicated that Dimension 2 - Assurance was the most important of the five service quality dimensions and that Dimension 4 - Empathy was the second most important. This was the case for both the aggregated sample and disaggregated individual school samples. A similar result surfaced for all ethnicity and income levels in the aggregated study sample. This finding was surprising to the researcher because the research conducted by Schneider et al. (2000) indicated that parents would place a higher value on teacher quality and test scores than they would on the elements included in the dimensions of Assurance and Empathy. This may have been due to the fact that the survey addressed parent perceptions about their current school rather than a hypothetical school, and it maintained a focus on customer service with broad descriptors of school quality rather than specific teacher quality indicators.

The category of Assurance measured the knowledge and courtesy of individuals working within the school and their ability to inspire parents' trust and confidence. Specific items such as safety, class size and the quality of school leadership were included in this dimension and could serve as an area of focus for

principals if a discrepancy was apparent between the individual importance and performance ratings for their school.

The Empathy dimension focused on the school's ability to provide a caring, compassionate learning environment where individual needs were recognized and members of the school community felt welcome and respected. By examining a school's overall performance in this dimension with an analysis of the specific indicator statements, principals would be able to define areas of strength and improvement.

However, in four demographic categories (i.e. Unidentified, African American, Asian ethnicities and the $0-$24,999 income level) Dimension 4 - Empathy was rated as being most important and Dimension 2 - Assurance was second most important. It was interesting to note that this was the only time that Dimension 4 – Empathy was rated as being the most important of the five service quality dimensions. This finding indicates that parents of color and poverty might be more sensitive to the items contained within the dimension of Empathy (i.e. respect, tolerance and feeling welcome at school) The question that arises from this finding is what are principals doing to solicit input from parents in these categories who clearly desire respect but may not be a part of the more vocal and empowered parent groups. The fact that there were only slight differences between what parents of different ethnicities and income levels considered to be

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most important was a finding that might challenge the assumption that these characteristics have a strong influence on the educational values of parents.

The two service quality dimensions that were consistently rated by parents as being the least important were Dimension 5 – Responsiveness and Dimension 1 – Reliability respectively. Responsiveness focused on the schools ability to provide prompt service that meets the individualized needs of parents. Reliability measured the school's ability to accurately and dependably provide services related to academic program, student achievement and school processes. The principals noted during their interviews that Reliability was the one category that appeared to be of most importance to the district. Teacher quality, student achievement and academically related items were an area of prime focus for principal professional development. The discrepancy between the levels of importance assigned to this category by parents versus the district is an area worthy of additional consideration.

Importance vs. Performance

The aggregated data for the survey indicated that parents rated Dimension 2 - Assurance as being the most important of the service quality dimensions. In terms of performance, however, parents rated Dimension 2 in third place. This result was mirrored by the individual school importance and performance data for three of the four participating schools. This is an important finding that principals must consider as they identify areas for improvement. Clearly, parents were most

concerned with the level of assurance provided by the schools and their expectations were not being met. It would be prudent for principals to delve further into this dimension as the elements contained within may look very different at each school and may have varied meanings for parents. For example, safety at school may relate to a child's physical safety and/or emotional well-being.

Additionally, the lowest rated dimensions for both importance and performance in the aggregated sample and by individual schools were Dimension 5 – Responsiveness and Dimension 1 – Reliability. The results for School 4 differed in that Dimension 1 – Responsiveness was ranked third for both importance and performance. This finding points to the fact that the dimensions where the district was focusing its efforts (particularly Reliability), were not recognized by parents as being the most important or as having the highest levels of performance. This disconnect may cause some level of conflict for principals because if they focus their improvement initiatives on the district priorities of academics and achievement, they might miss opportunities to build relationships with parents that would allow them to nurture Assurance and Empathy. This result is also contradictory to the results of a study conducted by Schneider et al. (2000) where parents were asked to hypothetically rank order eleven attributes in order of importance. Teacher quality and high test scores were at the top of the list followed by safety and values of the school. Again, it should be noted that the

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survey used in this study did not include statements that directly pertained to

teacher quality and that the parents were responding with their perceptions of their

own school rather than a hypothetical one.

Originally, the researcher had intended to complete a detailed gap analysis

of the differences between the importance and performance responses. After

running the statistical procedures and finding negligible differences between the

importance and performance of many of the indicators, the researcher determined

that this analysis would not lead to findings that would assist principals with

improving satisfaction or service quality. One could potentially spend a lot of

time examining gaps for items that may not be of high importance to parents and

the assumptions made from this type analysis might not be accurate. However,

the rank ordering of the importance and performance ratings for the specific

quality indicator statements was meaningful to principals because they could see

the relationships and make comparisons. Since the service quality dimensions

were composed of multiple quality indicator statements, it was more difficult for

principals to identify specific areas for improvement within the broader service

quality dimensions. The individual quality indicators were direct statements that

provided principals with a context for action.

The results indicated that regardless of ethnicity or socioeconomic status

Question 7 regarding children's safety at school was the most important question

to parents. Question 4 about the child's attitude toward school (i.e. my child likes

going to school) and Question 16 about the parents' level of comfort discussing

their child's needs with the teacher were also rated as being very important. All

parents rated the same three indicators as being the least important. Question 8

regarding the Collaborative School Committee (CSC) process, Question 5 about

high test scores and Question 20 about the availability of before and/or after

school programs consistently received the lowest importance ratings from parents.

The finding regarding the importance of the Collaborative School Committee

(CSC) process was disconcerting in that principals consistently identified the CSC

as being an important vehicle for parent input, feedback and decision-making.

And, similarly, the question regarding high test scores surfaced another

disconnect given that one of the primary areas of focus for the district was

increasing test scores. These findings challenge the common assumption that

parents of different backgrounds care about different factors. These results

indicate that all parents were most and least concerned about the same things.

They all valued the safety and well-being of their children with a focus on their

children's needs more than the school structures and outcomes.

Principal Perceptions

The principal interviews resulted in revealing a theme of random practices

to gather information from parents and limited use of the data for school

improvement. Their data collections methods relied on informal measures such as

conversations meetings and regular school processes like the school satisfaction

surveys and CSC meetings. All principals stated that the survey provided valuable information for guiding their efforts to define areas to be considered for school improvement. There was a sense that the information provided in relation to parents' perceived levels of performance would be most relevant to teachers. They felt that the information about parent ratings of the level of importance would be helpful as new surveys were designed in the future. They also thought that retrieving input from parents about what was most important may not be necessary on an annual basis.

The principals shared that a tool of this nature provided an efficient measure of school satisfaction but that it was a summative assessment of what has taken place over the course of the year. They were curious to consider what form of data schools could collect on a more frequent and perhaps informal basis to guide practice. The principals referred to the fact that regular, informal conversations with parents tended to provide more information about issues that required immediate attention that would in turn have an impact of levels satisfaction. However, this pointed to a considerable issue in that the primary source of data these principals used to gauge parent concern and need was reliant upon direct communication with the principal. This practice is problematic because only the perspectives of parents who were comfortable speaking up would matter. Not only did this present an issue for parents who were not comfortable or available to converse with the principal, it did not take into

account the fact that some parents and principals were not able to communicate directly due to language barriers.

Another item the principals discussed was the fact that this information would be discussed at their upcoming CSC meetings as this was the forum for addressing the data made available through the survey. It seemed somewhat problematic that while the survey results indicated that the CSC was the least important of the service quality indicators to the parents, the principals continued to think of it as being the appropriate process.

The principals also raised the issue that the dimensions and specific questions rated by parents as being the most important (i.e. Assurance and Empathy) were the categories the least related to academic program, student achievement and instructional methods and content. The principals noted a discrepancy and noticed that there was a disconnect between what parents reported as being important and what the district focused on in terms of professional development and measures of performance. Traditionally, public schools receive their direction from the district, but the heightened levels of competition are giving parents more influence. If parent feedback is important to create strong schools and increase levels of satisfaction, but what does a school principal do when this feedback does not align with the directives from the district? Do survey questions need to change to better inform school improvement efforts?

Finally, the principals were most interested in the responses to specific questions and the comparison between the parents' importance ratings and the school's performance ratings for each individual question. The analysis by service quality dimension did not appear to be as meaningful to the principals. This was due to the fact that the principals were not as familiar with the broad service quality dimensions and that the individual questions provided a level of detail they felt they could act upon.

Limitations of the Study

There are limitations to consider when analyzing and interpreting the results of this research. This study was completed at four elementary schools with relatively heterogeneous student populations and representation from various ethnicities and income levels. However, participation from all demographic groups was not evenly dispersed at all schools. Additionally, other elements such as neighborhood crime rates, average age of the community and home ownership versus rental properties were not considered. There was also no way to discern if the results were specifically attributed to particular opinions associated with the various demographic groups or if they were reflective of an overall set of experiences at a specific school. It is conceivable that the survey results may have looked different at schools with more homogeneous populations or if more detailed correlations between survey responses and demographic details had been examined.

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There was a strong response rate at each of the schools but the overall sample size was not large enough to generalize across the entire district. Additionally, while the surveys and study documentation were provided in English and Spanish, some families may have required translation into other languages in order to participate.

In relation to the survey design, the original SERVQUAL tool by Parasuraman, Zeithaml and Barry (1985) was used to design the survey for this study in order to focus the research on parents' perceptions of service quality within the field of education. As such, the researcher attempted to maintain the integrity of the SERVQUAL tool and did not include questions that specifically addressed teacher quality. It is plausible that this had an impact on what parents reported as being most important because items related to teacher quality were not specifically addressed.

The survey questions were written in a neutral format without detail or explanation. The simplicity of the statements may have prevented the respondents from having a complete or common understanding of what was being asked or referenced. For example, Question #8 simply stated, "Collaborative School Committee (CSC) process." The lack of detail in this question may have had an impact on responses.

In order to examine the importance and performance of service quality in schools, the survey questions had to be assigned to the various service quality

dimensions. This was done by the researcher using the original SERVQUAL tool and definitions of the service quality dimensions as developed by Parasuraman, Zeithaml and Barry (1985). It is possible that some of the questions could have been assigned to different dimensions.

The surveys were delivered to parents via the oldest or only student attending a school. These students were identified through the district's student information system, which may have included duplicate entries or failed to clearly identify siblings with different last names or addresses. Participation in the study was encouraged with the promise of a small prize for students who returned a completed survey by the deadline. There was no way to verify that the surveys were actually completed by the parent.

The post-survey interviews with principals yielded limited responses. This could have been due to the fact that the principals had limited time to become familiar with the data prior to responding to the questions.

Conclusions

When parents rate the dimension of Assurance, Empathy and Tangibles, they have a set of experiences upon which to base their expectations and evaluations of performance. These judgments are not dependent upon having access to professional knowledge, experience or training within the field of education. For example, most parents are keenly aware of their child's safety and can determine if a situation is dangerous or uncomfortable based on personal

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experience and intuition. Or, when considering empathy, parents draw upon personal experience to determine if they feel respected at the school or their child is happy and feels supported. Tangibles can also be recognized without formalized training by noticing if the school is clean and orderly, or if the classrooms are supplied with new materials and sufficient equipment.

However, when it comes to assessing things that fall into the categories of Reliability and Responsiveness, parents may feel less inclined or prepared to make assessments of this nature. Given the low levels of importance parents in this study assigned to these categories, one must consider why this is the case. Is it that parents don't understand the indicators included in these dimensions? Or, could they be at a disadvantage because of the more technical nature of the indicators included in these dimensions? Is it plausible that when parents feel they lack the expertise to assess dimensions that are more closely related to instructional components and academic rigor, they feel less qualified to make such judgments and therefore rate these dimensions with lower importance and performance ratings? Is it possible that these categories are truly not as important as their child's safety and well being? As the data demonstrated, safety was the most important indicator for parents across all schools and demographic groups. If a parent has concerns related to a child's safety at school, it may be difficult for that parent to accurately assess or consider the other dimensions.

The examination of these findings prompted the researcher to consider the

existence of a relationship between Maslow's Hierarchy of Needs and the service

quality dimensions. In 1943 psychologist Abraham Maslow presented a theory of

motivation that suggested people are driven by a variety of factors (Bolman &

Deal, 2003, Maslow, 1943). Some of these factors are more fundamental and

urgent than others, but the theory suggested that a person's most basic needs must

be satisfied before that individual can consider higher needs (Bolman and Deal,

2003). As demonstrated in Figure 9, Maslow identified a hierarchy of five basic

categories of human needs.
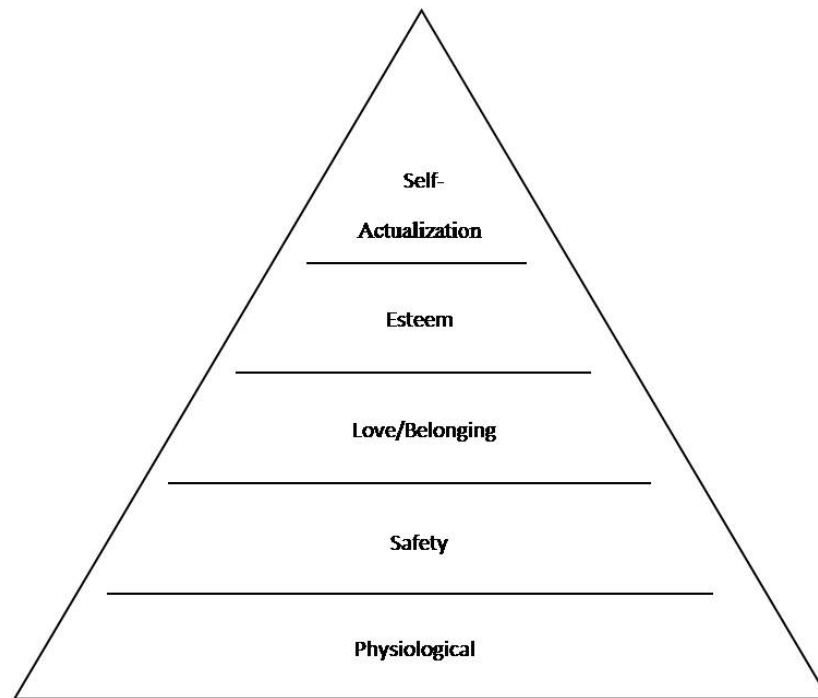
Figure 9. Maslow's Hierarchy of Needs

Maslow suggested that the most basic needs of oxygen, food, water,

physical health and comfort must be satisfied first (Maslow, 1943 and Bolman

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and Deal, 2003). The higher level needs of Esteem and Self-Actualization can only be reached after the more basic needs have been satisfied (Bolman and Deal, 2003). Additionally, given the variety of personal circumstances, individuals may have needs that are more fundamental than others. For example, Bolman and Deal (2003) state, "The desire for food dominates the lives of the chronically hungry, but other motives drive people with enough to eat."

Interestingly, there is an apparent split within the hierarchy. The first three levels including Physiological, Safety and Love/Belonging attend to a person's social-emotional needs. The upper levels of Esteem and Self-Actualization focus on the higher level cognitive components. If one considers Maslow's Hierarchy of Needs in relation to the daily experiences of children and parents, perhaps a better understanding of the rankings parents assign to the importance of the various service quality dimensions can be developed. For example if parents have concerns about the safety or well-being of their children, it will be difficult for parents to shift their attention to the higher categories of Esteem and Self-Actualization where the elements associated with learning, achievement, problem solving and independence exist. The results of this study encourage one to consider what schools are doing in order to better meet the social-emotional needs of students to motivate and allow them to reach the higher cognitive levels. This is yet another area principals must consider as they define areas for future improvement.

Recommendations for Future Research and Principal Leadership

The research conducted in this study may serve as a point of departure for future investigations in the area of service quality within the field of education. To expand this research, one may consider conducting a similar study in a variety of different manners. Some suggestions include:

- Conducting a similar study at a variety of schools with homogeneous populations to isolate the school's effect on parent satisfaction

- Conducting the study with a larger sample size

- Conducting similar research with middle or high school parents

- Investigating specific service quality dimensions (i.e. those with highest or lowest ratings) for in depth review to learn more about what is working and what could be improved upon within a certain area of service quality

- Conducting further research with parents to refine survey questions and to determine what questions should be used to represent each service quality dimension

- Conducting research focused on the importance of service quality indicators separate from performance research

- Conducting further research that incorporates or adds a dimension focused on teacher quality as it relates to service quality

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- Investigating how schools can better address Customer Relationship Management in an effort to allow for and be responsive to parent input without being confined by the resulting expectations

- Refining the development of diagnostic and reporting tools to better communicate survey results with school administrators

In addition to these suggestions, the study points to several implications for principal preparation and leadership. The first and most notable relates to soliciting and responding to feedback from parents – something both acting principals and those preparing to enter the field must be better prepared to do. Given the discrepancy between the low level of importance parents assigned to structures such as the Collaborative School Committee (CSC) and the fact that principals reported informal verbal communication as being a primary source of feedback, additional measures for retrieving parent input and addressing concerns must be developed. The current structures and methods create a perpetual cycle of communication amongst motivated and involved parents because they are the ones who not only raise the issues, but they are also the ones who typically attend CSC meetings. Measures for reaching beyond this parent set must be established to ensure better representation across the entire school population. If one accepts the notion that parents are consumers, then their voices need to be heard.

Another area of consideration for principals is that the service quality dimensions of Assurance and Empathy were consistently rated by parents as

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being the most important. These dimensions align with the more urgent needs

according to Maslow's Hierarchy of Needs. Given the social-emotional, personal

nature of these dimensions, it would seem that that a school's performance in

relation to these dimensions is connected to the school culture. This is an

important consideration for principals as they attend to these dimensions. The

indicators of safety, respect, feeling welcome and sincerity are fundamental

underpinnings of the school culture.

A third area of impact for principals is the need to find a balance between

the district's focus on Reliability and the parents' indicated levels of importance

and performance related to this dimension. In an era of standards-based, data-

driven instruction where teachers and principals are highly accountable for

learning, principals must find a way to bridge the gap for parents by helping them

develop an understanding of the importance of Reliability and how it is measured.

If learning is thought of as a partnership between the school and home, parents

and principals must have a better awareness of how they can attend to the

physiological, safety and belonging needs in order to reach the levels where

learning, achievement and accountability exist.

A final implication for principal leadership is the use of parent satisfaction

data. Typically, principals perceive this information as form of summative

feedback intended to capture a broadened opinion of how the school is doing. It

may or may not be used as information to guide improvement efforts and inform

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the decision-making process. And, it may or may not provide a truly representative parent perspective as it is incumbent upon parents to complete and return the survey by mail. This inconsistent use of the data diminishes the value of parent input and may influence the decisions of where parents send their children to school.

Final Thoughts

The findings revealed through this study point to many areas of consideration for both school administrators and district level officials. Access to information and changes in legislation have empowered parents to be informed consumers and provided them with a lever to impact the overall educational experiences of their children.

Hill (1995) made the analogy that school choice was akin to choosing a family doctor (p. 129). This analogy can be extended when one considers that over time, educators have witnessed the evolution of the parent relationship from one that was similar to the doctor-patient association to one that is more like the business-consumer relationship. For example, when patients sought medical treatment in the past, the doctor made a diagnosis and recommendation for treatment, and the patient usually complied with the doctor's orders. With the increased availability of information, patients now have the ability to research medical conditions and may be more inclined to question the professional's judgment or pursue another opinion. If patients don't agree with the professional

recommendation, they seek service elsewhere. This relationship exercises the flexibility of the business-consumer relationship. If the consumer seeks a product or service they can choose to work with a variety of different businesses. In the event that they are not satisfied with the product or experience, they have the option to try and negotiate with the business or take their business elsewhere. This is the relationship that now exists within public education where school choice is available to all parents.

If school administrators fail to acknowledge this new dynamic and accurately identify and understand the indicators parents consider to be most important when they define quality and satisfaction, they may find that parents will go in search of other options. Principals cannot overestimate the need to attend to areas that if improved, could lead to higher levels of parent satisfaction, loyalty and engagement. The voices of all must be heard if the desire to create strong schools is to become a reality.

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Appendix A

Original Questions by Service Quality Dimension

TANGIBLES – Physical Attributes, communication materials
1. The school has modern-looking equipment.
2. The school has well-maintained facilities.
3. The school staff members dress appropriately.
4. The school spends enough money per student.
5. The textbooks and instructional materials meet State standards.
6. There is an orderly, productive school environment.
7. Parents/guardians are kept informed about what is happening at school.

ASSURANCE – Knowledge and Courtesy of employees and their ability to inspire trust and confidence
1. School staff is respectful of parents/guardians.
2. My child is safe at school.
3. School staff members are highly qualified and fully credentialed by the State of Colorado.
4. Classes are not overcrowded. – Empathy, Tangibles
5. I feel welcome in my child's school.
6. The principal provides effective leadership for our school.
7. Parents are respected at this school.
8. The staff keeps me informed about safety and emergency issues at the school. - Communication
9. I feel it is important for my child to obey the classroom and school rules.
10. I know there is a policy about bullying behavior and understand that bullying is not tolerated at this school. – Communication

RELIABILITY – ability to perform the promised service dependably and accurately
1. I believe the school will do what it says it will.
2. When members of the school staff promise to do something by a certain

	time, they do it.
3.	Students get high test scores.
4.	The CSC process works well at my school
5.	I believe my child is getting a quality education at this school.

EMPATHY – Caring, individualized attention provided to customers

1.	School staff members give students personal attention. - Empathy
2.	School staff give parents personal attention.
3.	When a parent/guardian has a problem, the school staff shows a sincere interest in solving it.
4.	Students get the individual attention they need.
5.	Children at the school come from many different racial and ethnic backgrounds.
6.	School staff members are available when I need them.
7.	My child likes going to school.
8.	In this school, my child is treated fairly by administrators (the principal, assistant principals).
9.	I feel comfortable discussing my child's needs with teachers and staff.
10.	The staff keeps me informed about how my child is doing in school.
11.	The faculty and staff promote understanding among students from different backgrounds.

RESPONSIVENESS – willingness to help customers and provide prompt service

1.	Parents/guardians are kept informed about how their child is doing at school – Communication
2.	School staff members are available when I need them.
3.	The school staff welcomes suggestions from parents.
4.	School staff members respond promptly to parent/guardian requests.
5.	Students get the individual attention they need
6.	My child is given challenging work in all classes.

MISCELLANEOUS – questions that don't match above categories
1. The teachers give me ideas about how I can help my child do his or her best.
2. The school provides prevention programs to enhance student safety and promote good choices.
3. I am pleased with the academic progress of my child.
4. The school adequately prepares students to do well on the CSAP.
5. I know what my child needs to do to be able to go to college.
6. This year my child has had all of the books for every class.
7. This school was my first choice for my child to attend.
8. The Denver Plan will improve my child's school.
9. I would like to be more involved in my child's school.

Parent Satisfaction Survey

Front

Denver Public Schools • Parent Satisfaction Survey 2008-2009

Use a No. 2 Pencil ONLY! → Correct mark: ●

PART 1: DEMOGRAPHIC INFORMATION

1. Please indicate your ethnic background.

   ○ Hispanic   ○ African American   ○ White   ○ Asian/Pacifc Islander   ○ Native American   ○ Other

2. Please indicate your household income level (Fill in one bubble).

   ○ $0 - $24,999   ○ $25,000-$49,999   ○ $50,000-$74,999   ○ $75,000-$100,000   ○ More

3. What grade are your children in (Fill in all bubbles that apply).

   ○ ECE   ○ Kindergarten   ○ 1st   ○ 2nd   ○ 3rd   ○ 4th   ○ 5th

4. This is our assigned neighborhood school (Fill in one bubble).

   ○ Yes   ○ No

5. How many schools has your child attended since he/she started school (Fill in one bubble).

   ○ 1   ○ 2   ○ 3   ○ 4   ○ 5   ○ 6   ○ More than 6

6. If you have attended more than one school, please indicate why (Fill in all bubbles that apply).

   ○ We moved   ○ Didn't like the academic program   ○ Class sizes were too big   ○ Safety concerns
   ○ Before/After school programs not offered   ○ Difficulties with staff   ○ Other

PART II: SERVICE QUALITY

Please rate the following statements on both their importance to you and on your school's performance.

Quality Indicators	IMPORTANCE How important is this to you?				PERFORMANCE How would you rate your school?			
	Not	Somewhat	Very	Extremely	Poor	Fair	Good	Excellent
1. Well-maintained facilities	○	○	○	○	○	○	○	○
2. Class size	○	○	○	○	○	○	○	○
3. The school does what it says it will	○	○	○	○	○	○	○	○
4. My child likes going to school	○	○	○	○	○	○	○	○
5. High Test Scores	○	○	○	○	○	○	○	○
6. Strong academic program	○	○	○	○	○	○	○	○
7. My child's safety at school	○	○	○	○	○	○	○	○
8. Collaborative School Committee (CSC) process	○	○	○	○	○	○	○	○
9. Effective principal leadership	○	○	○	○	○	○	○	○
10. Feeling welcome at my child's school	○	○	○	○	○	○	○	○

○○○○ For School Use Only

Please continue on back of form.

Back

Quality Indicators	IMPORTANCE How important is this to you?				PERFORMANCE How would you rate your school?			
	Not	Somewhat	Very	Extremely	Poor	Fair	Good	Excellent
11. Orderly, productive school environment	○	○	○	○	○	○	○	○
12. Parents/Guardians kept informed about what is happening at school	○	○	○	○	○	○	○	○
13. School balances academics, art, music, and P.E.	○	○	○	○	○	○	○	○
14. Availability of staff when needed	○	○	○	○	○	○	○	○
15. Up-to-date equipment and classroom materials	○	○	○	○	○	○	○	○
16. Comfort discussing child's needs with teachers and staff	○	○	○	○	○	○	○	○
17. Individual attention provided to students	○	○	○	○	○	○	○	○
18. Prompt response to parent requests	○	○	○	○	○	○	○	○
19. School respects cultural, religious and personal backgrounds of families	○	○	○	○	○	○	○	○
20. Before and/or after school programs available	○	○	○	○	○	○	○	○
21. Challenging work is provided in all classes	○	○	○	○	○	○	○	○
22. School has a sincere interest in solving problems	○	○	○	○	○	○	○	○

DO NOT WRITE IN THIS SPACE.

Appendix C

Principal Informed Consent – Signature Form

INTERVIEW INFORMED CONSENT FORM
DISSERTATION RESEARCH
What Matters Most? Measuring Service Quality to Improve Schools

SIGNATURE FORM

I have read and understood the foregoing descriptions of the study called *What Matters Most? Measuring Service Quality to Improve Schools*. I have asked for and received a satisfactory explanation of any language that I did not fully understand. I agree to participate in this study, and I understand that I may withdraw my consent at any time. I have received a copy of this consent form.

Signature _____ Date _____

_____ I agree to be audio-taped.

_____ I do not agree to be audio-taped.

Signature _____ Date _____

Appendix D

Parent Informed Consent Form

INFORMED CONSENT FORM

DISSERTATION RESEARCH
What Matters Most? Measuring Service Quality to Improve Schools

You are invited to participate in a study that will examine service quality dimensions in relation to parent satisfaction. The purpose of this study is to examine the relationship between service quality experiences and parent satisfaction at four urban elementary schools. A survey has been designed to measure parents' levels of school satisfaction in relation to five service quality dimensions - tangibles, reliability, responsiveness, assurance and empathy. This survey tool will provide school administrators with a way to determine what service quality factors matter most to parents, compare how parents' assigned levels of importance for various service quality indicators aligns with the schools' levels of performance and provide a format for presenting this information in a manner that is easily interpreted and can thereby be used to guide school improvement efforts. It is anticipated that the results made available from this study will help improve the district's and school's responsiveness to parents. As such, to ensure complete and accurate analysis, data will be reported both by individual school and as combined school totals. Throughout the data collection process, during data analysis and in the final reporting phase all schools will be coded and referred to only by number. All reports will use the assigned numbers. Reports from this study will be provided to the principal at each of the participating schools and appropriate district level administration. In addition, this study is being conducted to fulfill the requirements of a doctoral dissertation program and the class ADMN 5995 – Dissertation Research. The study is being conducted by Shannon Hagerman. Results will be used to enhance school improvement efforts, complete doctoral dissertation work and to receive a grade in the course. Shannon Hagerman can be reached at shagerma@du.edu or 720.335.4112. This project is supervised by the course instructor, Dr. Susan Korach, Morgridge College of Education, University of Denver, Wesley Hall, Room 312, 2135 East Wesley Ave. Denver, CO 80208, 303.871.2212 or skorach@du.edu

Participation in this study should take about 15 minutes of your time. Participation will involve responding to 22 questions about service quality and satisfaction at your child's school and 6 general information questions. Participation in this project is strictly voluntary. The risks associated with this project are minimal. If, however, you experience discomfort you may discontinue the interview at any time. We respect your right to choose not to answer any questions that may make you feel uncomfortable. Refusal to participate or withdrawal from participation will involve no penalty or loss of benefits to which you are otherwise entitled.

Your responses will be identified by school code number only and will be kept confidential. Only the researcher will have access to your individual data and any reports generated as a result of this study will use only group averages and paraphrased wording. However, should any information contained in this study be the subject of a court order or lawful subpoena, the University of Denver might not be able to avoid compliance with the order or subpoena. Although no questions in this interview address it, we are required by law to tell you that if information is revealed concerning suicide, homicide, or child abuse and neglect, it is required by law that this be reported to the proper authorities.

If you have any concerns or complaints about how you were treated during this study, please contact Susan Sadler, Chair, Institutional Review Board for the Protection of Human Subjects, at 303-871-3454, or Sylk Sotto-Santiago, Office of Sponsored Programs at 303-871-4052 or write to either at the University of Denver, Office of Sponsored Programs, 2199 S. University Blvd., Denver, CO 80208-2121.

You may keep this page for your records. Please sign the next page if you understand and agree to the above. If you do not understand any part of the above statement, please ask the researcher any questions you have.

ATTENTION STUDENTS!

Please bring this very important package home tonight

and ask your parent or guardian to take some time to

fill it out. Any student who turns in a completed survey by

THIS FRIDAY, wins a prize! Thanks for your help!

Appendix F

School 1 Performance Framework Scorecard

Enrollment:	581
%FRL:	49.2%
%ELL:	11.5%
%SPED:	10.5%
% Minority	69.2%

Accredited on Watch

	Earned Points	Possible Points	% of Points Earned	Stoplight
Elementary Educational Level				
1. Student Progress Over Time--Growth	28	82	34%	Approaching
2. Student Achievement Level--Status	32	44	73%	Meet
4. Student Engagement	4	6	67%	Meet
5. School Demand	4	4	100%	Exceeds
Overall School Performance	68	136	50%	Accredited on Watch

School 2 Performance Framework Scorecard

Enrollment:	458
%FRL:	40.8%
%ELL:	14.2%
%SPED:	7.9%
% Minority	46.1%

Meets Expectations

	Earned Points	Possible Points	% of Points Earned	Stoplight
Elementary Educational Level				
1. Student Progress Over Time--Growth	62	82	76%	Meet
2. Student Achievement Level--Status	34	44	77%	Meet
4. Student Engagement	5	6	83%	Exceeds
5. School Demand	3	4	75%	Meet
Overall School Performance	104	136	76%	Meets Expectations

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School 3 Performance Framework Scorecard

Enrollment:	389
%FRL:	61.4%
%ELL:	12.9%
%SPED:	22.6%
% Minority	56.6%

Accredited on Watch

	Earned Points	Possible Points	% of Points Earned	Stoplight
Elementary Educational Level				
1. Student Progress Over Time--Growth	20	82	24%	Does not meet
2. Student Achievement Level--Status	26	44	59%	Meet
4. Student Engagement	2	6	33%	Does not meet
5. School Demand	1	4	25%	Does not meet
Overall School Performance	49	136	36%	Accredited on Watch

School 4 Performance Framework Scorecard

Enrollment:	288
%FRL:	53.1%
%ELL:	15.6%
%SPED:	14.6%
% Minority	46.5%

Meets Expectations

	Earned Points	Possible Points	% of Points Earned	Stoplight
Elementary Educational Level				
1. Student Progress Over Time--Growth	26	70	37%	Approaching
2. Student Achievement Level--Status	38	44	86%	Exceeds
4. Student Engagement	3	6	50%	Approaching
5. School Demand	4	4	100%	Exceeds
Overall School Performance	71	124	57%	Meets Expectations

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Appendix G

ANOVAs for Service Quality Dimensions By School

School 1	Importance			**School 1**	Performance		
Dimension	N	Mean	Std. Deviation	Dimension	N	Mean	Std. Deviation
2 - Assurance	322	0.39	0.39	3 - Tanbgibles	325	0.77	0.47
4 - Empathy	323	0.44	0.43	4 - Empathy	325	0.78	0.57
3 - Tangibles	323	0.53	0.47	2 - Assurance	325	0.85	0.53
5 - Responsiveness	320	0.56	0.49	5 - Responsivenes	323	0.90	0.54
1 - Reliability	322	0.65	0.51	1 - Reliability	323	0.92	0.47

School 2	Importance			**School 2**	Performance		
Dimension	N	Mean	Std. Deviation	Dimension	N	Mean	Std. Deviation
2 - Assurance	158	0.36	0.34	3 - Tanbgibles	161	0.54	0.41
4 - Empathy	158	0.42	0.40	4 - Empathy	160	0.55	0.51
3 - Tangibles	158	0.52	0.40	2 - Assurance	159	0.63	0.43
5 - Responsiveness	157	0.58	0.39	5 - Responsivenes	160	0.73	0.49
1 - Reliability	158	0.75	0.45	1 - Reliability	160	0.82	0.43

School 3	Importance			**School 3**	Performance		
Dimension	N	Mean	Std. Deviation	Dimension	N	Mean	Std. Deviation
2 - Assurance	117	0.39	0.43	4 - Empathy	119	0.73	0.58
4 - Empathy	118	0.39	0.42	3 - Tangibles	119	0.75	0.51
3 - Tangibles	118	0.50	0.43	2 - Assurance	118	0.75	0.54
5 - Responsiveness	114	0.50	0.46	5 - Responsivenes	115	0.89	0.58
1 - Reliability	118	0.63	0.50	1 - Reliability	117	1.05	0.57

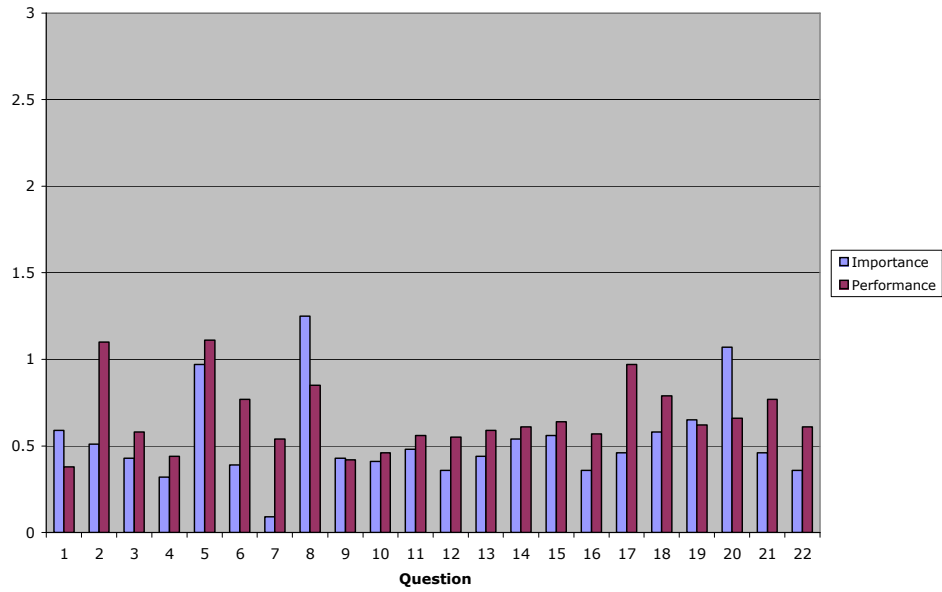| **School 4**	Importance			**School 4**	Performance		
Dimension	N	Mean	Std. Deviation	Dimension	N	Mean	Std. Deviation
2 - Assurance	182	0.38	0.35	4 - Empathy	183	0.55	0.47
4 - Empathy	183	0.40	0.41	2 - Assurance	184	0.64	0.46
5 - Responsiveness	177	0.56	0.44	5 - Responsiveness	177	0.68	0.48
3 - Tangibles	184	0.62	0.44	1 - Reliability	181	0.69	0.43
1 - Reliability	182	0.70	0.45	3 - Tangibles	183	0.73	0.45

Mean Response Graphs

Schools 1 & 2

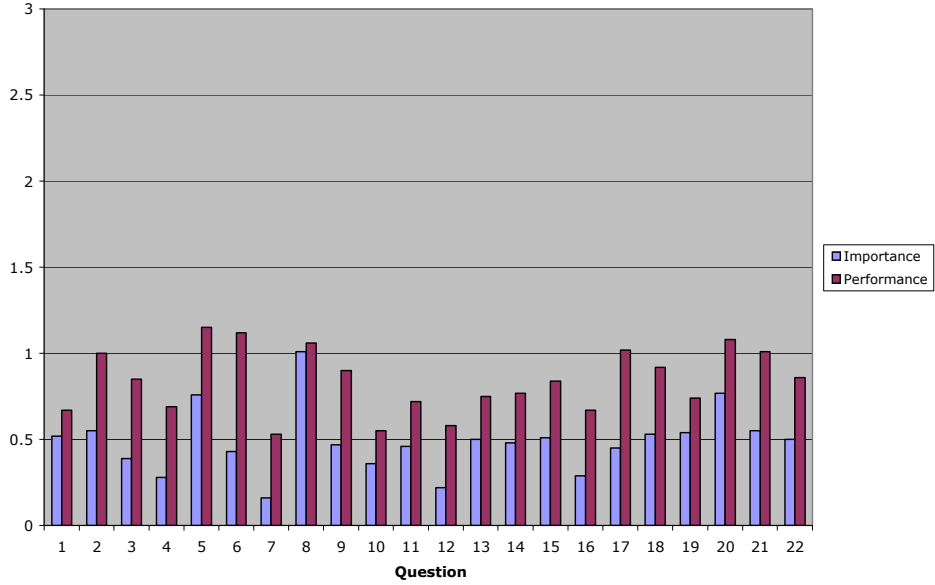### School 1 Mean Responses to Survey Questions
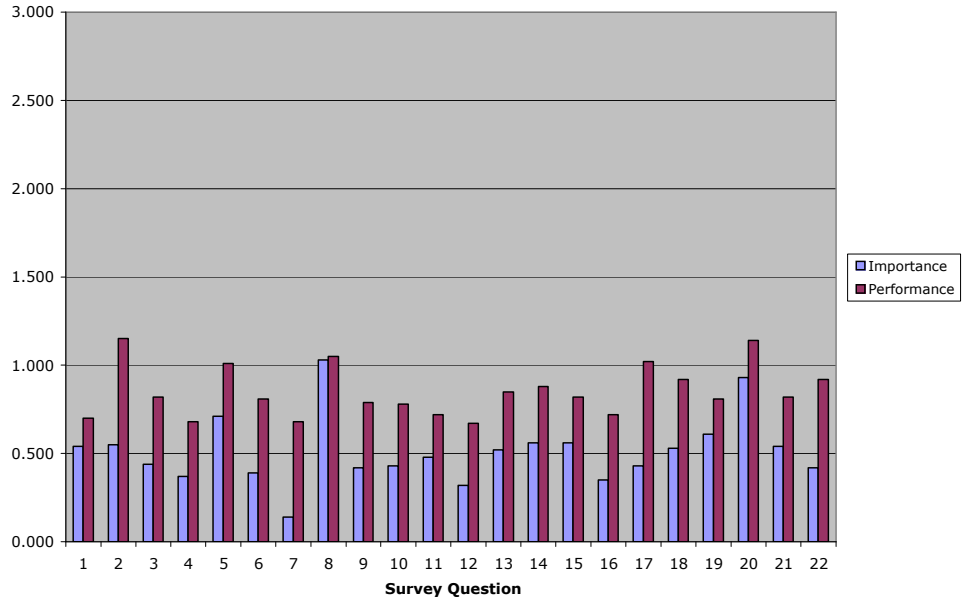
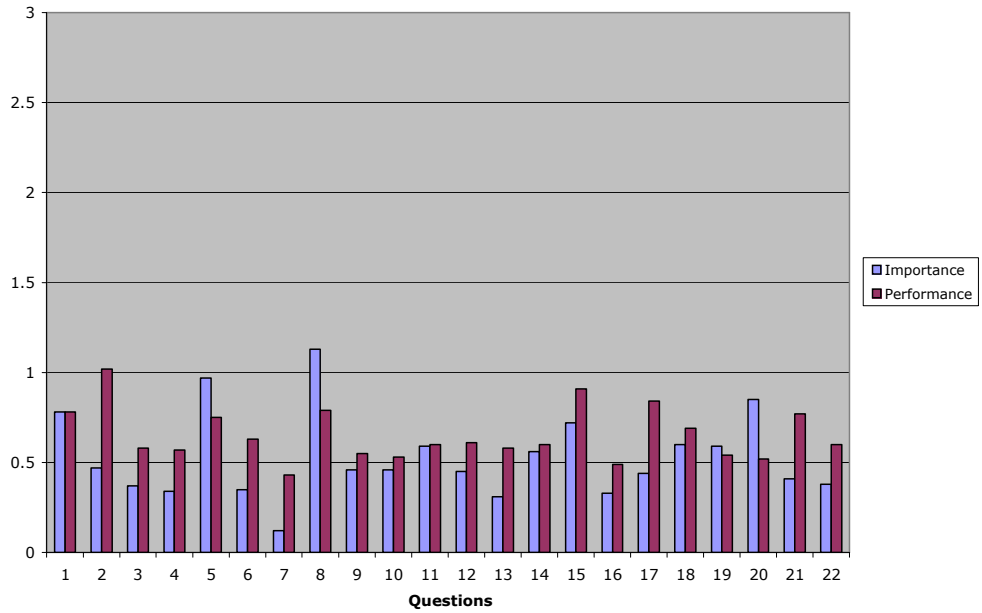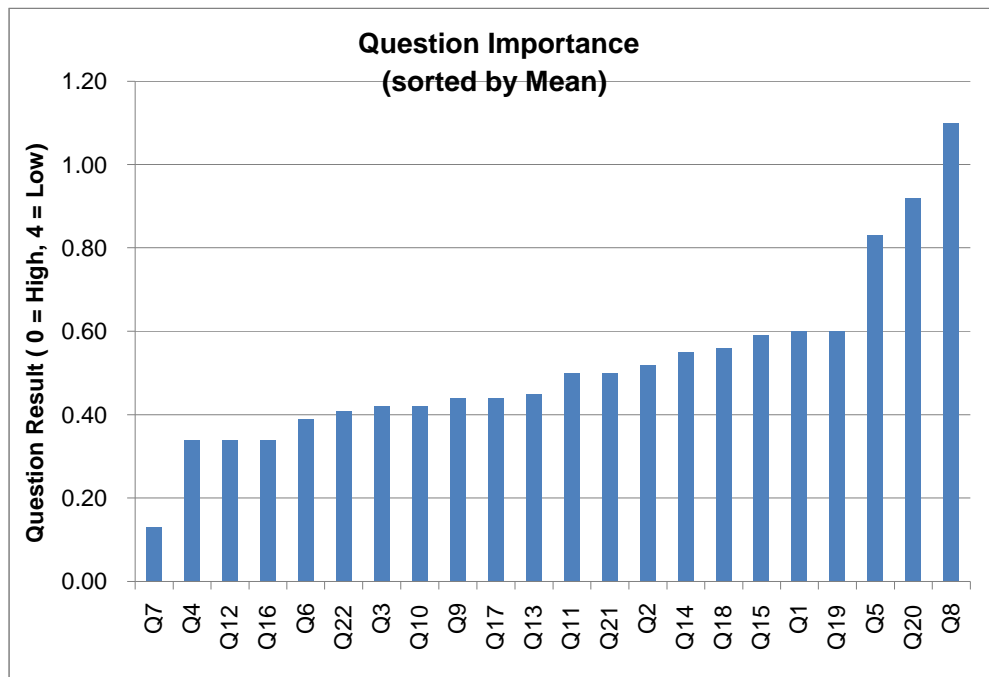### School 2 Mean Responses to Survey Questions

Schools 3 & 4

School 3 - Mean Responses to Survey Questions

School 4 - Mean Responses to Survey Questions

Aggregated Mean Importance Responses

Importance-Performance Rankings of Questions

School 1

Questions	Importance Mean	Importance Ranking	Performance Ranking	Performance Mean
Q 1 - Well-maintained facilities	0.54	15	4	0.70
Q 2 - Class size	0.55	16	22	1.15
Q 3 - The school does what it says it will	0.44	10	12	0.82
Q 4 - My child likes going to school	0.37	4	2	0.68
Q 5 - High test scores	0.71	20	18	1.01
Q 6 - Strong academic program	0.39	5	9	0.81
Q 7 - My child's safety at school	0.14	1	3	0.68
Q 8 - Collaborative School Committee (CSC) process	1.03	22	20	1.05
Q 9 - Effective principal leadership	0.42	6	8	0.79
Q10 - Feeling welcome at my child's school	0.43	8	7	0.78
Q11 - Orderly, productive school environment	0.48	11	6	0.72
Q12 - Parents/guardians kept informed	0.32	2	1	0.67
Q13 - School balances academics, art, music and P.E.	0.52	12	14	0.85
Q14 - Availability of staff when needed	0.56	18	15	0.88
Q15 - Up-to-date equipment and classroom materials	0.56	17	13	0.82
Q16 - Comfort discussing child's needswith teachers and staff	0.35	3	5	0.72
Q17 - Individual attention provided to students	0.43	9	19	1.02
Q18 - Prompt response to parent requests	0.53	13	17	0.92
Q19 - School respects cultural, religious and personal backgrounds of families	0.61	19	10	0.81
Q20 - Before and/or after school programs available	0.93	21	21	1.14
Q21 - Challenging work is provided in all classes	0.54	14	11	0.82
Q22 - School has a sincere interest in solving problems	0.42	7	16	0.92

Importance-Performance Rankings of Questions

School 2

Questions	Importance Mean	Importance Ranking	Performance Ranking	Performance Mean
Q 1 - Well-maintained facilities	0.59	18	0.38	1
Q 2 - Class size	0.51	14	1.10	21
Q 3 - The school does what it says it will	0.43	8	0.58	9
Q 4 - My child likes going to school	0.32	2	0.44	3
Q 5 - High test scores	0.97	20	1.11	22
Q 6 - Strong academic program	0.39	6	0.77	16
Q 7 - My child's safety at school	0.09	1	0.54	5
Q 8 - Collaborative School Committee (CSC) process	1.25	22	0.85	19
Q 9 - Effective principal leadership	0.43	9	0.42	2
Q10 - Feeling welcome at my child's school	0.41	7	0.46	4
Q11 - Orderly, productive school environment	0.48	13	0.56	7
Q12 - Parents/guardians kept informed	0.36	3	0.55	6
Q13 - School balances academics, art, music and P.E.	0.44	10	0.59	10
Q14 - Availability of staff when needed	0.54	15	0.61	11
Q15 - Up-to-date equipment and classroom materials	0.56	16	0.64	14
Q16 - Comfort discussing child's needs with teachers and staff	0.36	4	0.57	8
Q17 - Individual attention provided to students	0.46	11	0.97	20
Q18 - Prompt response to parent requests	0.58	17	0.79	18
Q19 - School respects cultural, religious and personal backgrounds of f	0.65	19	0.62	13
Q20 - Before and/or after school programs available	1.07	21	0.66	15
Q21 - Challenging work is provided in all classes	0.46	12	0.77	17
Q22 - School has a sincere interest in solving problems	0.36	5	0.61	12

Importance-Performance Rankings of Questions

School 3

Questions	Importance Mean	Importance Ranking	Performance Ranking	Performance Mean
Q 1 - Well-maintained facilities	0.52	15	0.67	4
Q 2 - Class size	0.55	18	1.00	16
Q 3 - The school does what it says it will	0.39	6	0.85	12
Q 4 - My child likes going to school	0.28	3	0.69	6
Q 5 - High test scores	0.76	20	1.15	22
Q 6 - Strong academic program	0.43	7	1.12	21
Q 7 - My child's safety at school	0.16	1	0.53	1
Q 8 - Collaborative School Committee (CSC) process	1.01	22	1.06	19
Q 9 - Effective principal leadership	0.47	10	0.90	14
Q10 - Feeling welcome at my child's school	0.36	5	0.55	2
Q11 - Orderly, productive school environment	0.46	9	0.72	7
Q12 - Parents/guardians kept informed	0.22	2	0.58	3
Q13 - School balances academics, art, music and P.E.	0.50	12	0.75	9
Q14 - Availability of staff when needed	0.48	11	0.77	10
Q15 - Up-to-date equipment and classroom materials	0.51	14	0.84	11
Q16 - Comfort discussing child's needswith teachers and staff	0.29	4	0.67	5
Q17 - Individual attention provided to students	0.45	8	1.02	18
Q18 - Prompt response to parent requests	0.53	16	0.92	15
Q19 - School respects cultural, religious and personal backgrounds of f	0.54	17	0.74	8
Q20 - Before and/or after school programs available	0.77	21	1.08	20
Q21 - Challenging work is provided in all classes	0.55	19	1.01	17
Q22 - School has a sincere interest in solving problems	0.50	13	0.86	13

Importance-Performance Rankings of Questions

School 4

Questions	Importance Mean	Importance Ranking	Performance Ranking	Performance Mean
Q 1 - Well-maintained facilities	0.78	19	15	.69
Q 2 - Class size	0.47	13	12	.60
Q 3 - The school does what it says it will	0.37	6	19	.79
Q 4 - My child likes going to school	0.34	4	1	.43
Q 5 - High test scores	0.97	21	2	.49
Q 6 - Strong academic program	0.35	5	11	.60
Q 7 - My child's safety at school	0.12	1	18	.78
Q 8 - Collaborative School Committee (CSC) process	1.13	22	5	.54
Q 9 - Effective principal leadership	0.46	11	14	.63
Q10 - Feeling welcome at my child's school	0.46	12	7	.57
Q11 - Orderly, productive school environment	0.59	16	4	.53
Q12 - Parents/guardians kept informed	0.45	10	9	.58
Q13 - School balances academics, art, music and P.E.	0.31	2	6	.55
Q14 - Availability of staff when needed	0.56	14	10	.60
Q15 - Up-to-date equipment and classroom materials	0.72	18	17	.77
Q16 - Comfort discussing child's needswith teachers and staff	0.33	3	22	1.02
Q17 - Individual attention provided to students	0.44	9	3	.52
Q18 - Prompt response to parent requests	0.60	17	21	.91
Q19 - School respects cultural, religious and personal backgrounds of families	0.59	15	16	.75
Q20 - Before and/or after school programs available	0.85	20	8	.58
Q21 - Challenging work is provided in all classes	0.41	8	20	.84
Q22 - School has a sincere interest in solving problems	0.38	7	13	.61