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Exploring Perceptions of School Quality:

Implications for School Administrators

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ABSTRACT

This study conducted in four secondary schools across three years, provides an example of how stakeholder perceptions about school quality might be obtained and analyzed to aid in setting administrative objectives. The participating schools served predominantly Caucasian students in suburban and rural areas. Approximately 30% of students at these schools received free or reduced lunch. Parents, students and school staff were asked to complete the Indicators of School Quality survey, which includes items regarding parent support, teacher excellence, student commitment, school leadership, instructional quality, resource management, and school safety. An average of 1098 parents, 159 teachers, and 3108 students completed surveys each year across the three years. School staff tended to rate their schools more positively on average than parents. Female students, younger students, and students claiming ethnic majority status all tended to rate their schools higher than other students. These results suggest that administrators could benefit from understanding how stakeholders differ in their perceptions of school quality, particularly as they engage in school improvement efforts.

Exploring Perceptions of School Quality:
Implications for School Administrators

Many studies have examined school effectiveness and the specific elements that contribute to success in schools (e.g., Edmonds, 1979; Hill & Rowe, 1996; Lispon, Mosenthal, Mekkelsen, & Russ, 2004; Mortimore, Sammons, Stoll, Lewis, & Ecob, 1988; Purkey & Smith, 1983; Reynolds & Packer, 1992; Rutter, Maughan, Mortimore, & Ouston, 1979); however, little has been written about educational stakeholders' perceptions of school quality. Here "stakeholder" refers to students, parents and school staff (including teachers, administrators and other personnel). Our review of the extant literature indicated that there is value in understanding stakeholders' perceptions, and reveals the need for further exploration of the differences between these perceptions and their relationship to educational outcomes (see e.g. Coleman & Collinge, 1993; Epstein, 1981; Heck, 2000; Karatzias, Power, & Swanson, 2001; Samdal, Wold, & Bronis, 1999; Townsend, 1997). Understanding the perceptions of the stakeholders may assist administrators and school teams in creating targeted change within their schools.

Utility of Understanding Stakeholders' Perceptions

Understanding stakeholders' perceptions may be helpful when assessing the effectiveness of a school. We wish to distinguish school quality from, but emphasize the close relationship to, school effectiveness (see Griffith, 2002). School *quality* generally means the characteristics of a school that make it desirable, particularly to the aforementioned stakeholders. School *effectiveness* refers to the degree to which a school actually produces desired outcomes (typically defined as improvements in student academic achievement). What stakeholders value and desire in their educational

experiences (elements of school quality) are closely aligned with what research identifies as important elements of an effective school (Townsend, 1997). Based on the premise that people may have a fairly accurate understanding of what makes a school successful, their perceptions may also lend insight into how well these elements are functioning within their school. Understanding stakeholders' perceptions might prove to be a relatively easy, cost effective, and time efficient method to evaluate school quality and effectiveness (Heck, 2000).

Research suggests that positive perceptions of school quality are related to improved academic performance. For example, one study reported that schools which were more positively perceived by stakeholders seemed to have an achievement advantage over those schools with poorer stakeholder perceptions, even after accounting for SES and ethnic variables (Heck, 2000). Some of the principles of organizational psychology have contributed to understanding the relationship between positive school perceptions and student achievement (Samdal et al., 1999). For example, when individuals perceive that they have a high level of control and influence, are given reasonable expectations, and believe that they have good social support from their colleagues and managers, they tend to be more productive (Karasek & Theorell, 1990). While noting some of the limitations this theoretical context poses, Samdal and colleagues (1999) made a convincing case for considering school as the students' work setting by explaining the similarities of these environments. They suggest that as adult workers' perceptions of their work environment influence their job performance, so might students' perceptions of school environment influence their academic performance. Samdal and colleagues (1999) specifically found that students' perceptions of their

autonomy, expectations, and support from their teachers and fellow students may be related to academic outcomes.

It is difficult to determine whether perceptions of school quality promote academic performance or stem from it—or both (e.g. Coleman & Collinge, 1993; Rutter et al., 1979). Nevertheless, Samdal et al. (1999) posited that their findings imply that if educators can effectively improve students' satisfaction with particular elements of their school, their achievement is likely to improve as well.

The direction and nature of the relationship between academic performance and school quality, although important to explore, might be secondary to the question of the extent to which school change is a cooperation between "top-down" and "bottom-up" processes, as well as an interaction between stakeholders at each level of involvement (e.g. teacher cooperation with other teachers, students with other students, etc.). Few would argue that stakeholders such as students, parents and teachers do not have an important influence in the school change process; these groups of stakeholders can each facilitate or inhibit efforts to bring about school change. Kelly & Lezotte (2003) asserted that, "Internal commitment by the school's stakeholders coupled with effective leadership is the fuel for the improvement process," and emphasized the importance of cooperation and alignment of stakeholder groups to the goals and mission of the school. Anfara, Patterson, Buehler and Gearity (2006) re-emphasized the necessity for cooperation between stakeholder groups, and added that these groups must feel responsible for success as well as having shared goals.

The need for cooperation among stakeholders thus emphasizes the necessity for school administrators to know where their stakeholders "stand" on important issues

related to school quality. This need, of course, also raises the question of what are the "important issues" for which solicitation of stakeholder perceptions might be most beneficial to administrators.

Stakeholders Perceptions, School Quality, and Student Achievement

Which elements of school quality and effectiveness are most pertinent to stakeholders' perceptions and how are they related to student performance? Four general categories of the educational experience were distilled from the literature as important and significant elements of school quality and effectiveness: teaching quality, positive school-home relations, school environment, and school leadership (see Edmonds, 1979; Hill & Rowe, 1996; Lispon et al., 2004; Mortimore et al., 1988; Purkey & Smith, 1983; Reynolds & Packer, 1992; Rutter et al., 1979). Each of these four categories will be discussed briefly.

Teaching quality. There is an abundance of research asserting that teaching quality is the single most important factor influencing student achievement (Darling-Hammond, 2000; Haycock 1998, Kaplan & Owings, 2001; Whitehurst, 2002). Teaching quality refers to the learning climate teachers create, effective use of curriculum, the goals and means of assessment they choose for their students, and other pedagogical techniques they employ (Kaplan & Owings, 2002).

Survey participants in Australia and the United States of America ranked well-trained teachers as the element of school effectiveness that was most important to them (Townsend, 1997). One of the most important and consistent predictors of student achievement was that students perceived that teachers' expectations were reasonable (Samdal et al., 1997). Similarly, student achievement was higher when stakeholders had

positive perceptions of various elements of teaching quality (Heck, 2000). These elements included how well teachers were perceived as utilizing class time effectively, keeping students on task, and providing students with extra help.

Positive school-home relations. A synthesis of years of research about school-home relations and student achievement affirms that family support of students' educational experiences has been linked to improved achievement (Henderson & Mapp, 2002). Students perform best when families are engaged in supporting student learning at home and when family involvement is focused on activities that are linked to learning (e.g. Clark, 2002; Dryfoos, 2000; Epstein, Simon, & Salinas, 1997; Starkey & Klein, 2000).

Effective schools tended to have stakeholders that perceived a positive relationship between school and home (Heck, 2000). In another study, over 90% of respondents in each class of stakeholder (parents, students, principals and teachers) reported that positive school-home relations were very important to them, with parents valuing these relations the most; interestingly these participants also reported that this element needed improvement (Townsend, 1997).

School environment. Inconsistencies in the literature complicate attempts to articulate what is meant by school environment (for a discussion on this subject, see Van Houtte, 2005). Other terms given to this and related concepts in the literature include school ethos (e.g. Rutter et al., 1979), school climate (e.g. Brookover, Beady, Flood, Schweitzer, & Wisenbaker, 1979), and school culture (e.g. Purkey & Smith, 1983), while the meaning associated with each slightly differs. Based on common themes we found in

the literature, we define school environment as the relationships that exist between teachers and students and amongst students themselves.

Some researchers reported that when students feel safe and cared for, and otherwise have good relationships with their teachers and peers, their academic performance improves (Samdal et al., 1999). Other research affirms that when stakeholders perceive the educational environment to be safe and caring, student achievement improves (Heck, 2000). Notably, one study found that students put a higher priority on these aspects of school quality than other stakeholders (Townsend, 1997).

School leadership. Based on a meta-analysis of studies that examined the effects of principals' leadership on student achievement, there is evidence to suggest that educational leadership is an important characteristic of effective schools (Witziers, Bosker, Kruger, 2003). Perhaps the most important factor of school leadership that contributes to academic performance is defining and conveying school mission and goals (Hallinger & Heck, 1998; Witziers et al., 2003).

Stakeholders highly value a clearly articulated school purpose (Townsend, 1997). In fact, with the exception of students, this aspect of the educational experience was critically important to all groups of stakeholders, who rated it second only to teacher quality. The principal's role in effectively communicating goals and direction to stakeholders was also important. Like school-home relations, participants believed this area needed some improvement. In another study, students also experienced better achievement outcomes when stakeholders perceived principals to be more supportive and oriented toward teaching excellence and school improvement (Heck, 2000).

Having a sense for the "important issues" is only the first step. Administrators can benefit further from assessing where stakeholders stand on these issues; where perceptions among stakeholders are in agreement, and where they differ. Knowing where stakeholder perceptions coincide and where they differ can help provide administrators a starting point from which effective dialogue can begin and retain a relevant focus. For example, administrators might find that on the whole, stakeholder groups agree that school-home relations can be improved. However, they might find that perceptions of school environment might vary. These differences might be particularly crucial for administrators to be aware of because they might represent potential sticking points in the development of shared goals and efforts to foster unity.

Previous Research on Differences between Stakeholders' Perceptions

Our review of the literature revealed very little research that reported on differences between stakeholder's perceptions. Even in those rare instances, analyzing differences in perception was typically a tangential feature of the research (e.g., Heck, 2000), and as such, little discussion on the subject could be found. Nevertheless, a synthesis of what was found as it relates to the present study is presented below.

One study explicitly examined and discussed the differences in perceptions of school quality amongst various stakeholders (Townsend, 1997). A key finding of this study was that stakeholders tended to value more those areas that directly affected them. For example, student involvement was more important to students than it was to staff, and school leadership was more important to principals than it was to students. Townsend also found that principals tended to value most of the elements of school quality higher than the other groups of stakeholders whereas students valued most of these elements the

least of all the stakeholders. Moreover, the adult respondents (parents, teachers, and administrators) tended to be more positive than the students in their evaluation of how well the elements were working in the school.

Although one study was found that explicitly examined the differences in perceptions between stakeholders (Townsend, 1997), no research was found that specifically examined potential differences between various subgroups of the student population (e.g., males/females and ethnic majority/minority). However, some studies did peripherally touch on a few of these potential differences. For example, no significant differences in perceptions of elements of school quality between boys and girls or between age groups were reported by Samdal et al. (1999). In contrast, Tymms (2001) found that girls reported having slightly more positive feelings toward school than boys. A "barely detectable connection" with older children having more positive attitudes toward school was also reported (Tymms, 2001, p. 174). Finally, although two studies suggest that cultural differences may exist in school perceptions across geographic and international boundaries (Samdal et al., 1999; Townsend, 1997), none of the research reviewed addressed potential differences in perceptions amongst those of different ethnicities or cultural backgrounds who were attending the same schools.

In summary, previous research on the differences in stakeholders' perceptions of various elements of school quality is sparse, and data from these studies is limited. It is difficult to determine what, if any, general differences may exist between groups of stakeholders and between subgroups of certain kinds of stakeholders. In addition, differences in stakeholder perceptions may be tied to specific school environments. For example, to the extent that schools facilitate the success of both boys and girls their

perceptions of school quality are likely to correspond rather than diverge. Generalizations about perceptual differences across settings might provide starting points for analyzing stakeholder perceptions in a given school or district, but these general hypotheses may or may not hold for a given school. Perhaps, more importantly, there has been little discussion on the implications of differences in perceptions and even less effort to translate these findings and implications for the educational administrator.

The Present Study

This study attempts to augment and enrich the literature on perceptions of school quality by providing an example of how stakeholder perceptions might be obtained for secondary schools, tracked for stability and change across time, and interpreted in setting administrative objectives. Specifically, we examined differences and similarities in perception of school quality among school staff, parents, and students in four secondary schools across three years. Differences in student perceptions between girls and boys, across grade levels, and by minority/majority status were also examined. Particular emphasis is given to implications of these findings that may be especially relevant to administrators as they facilitate the exploration of stakeholder perceptions in their own schools.

Method

Participants & Design

This study was descriptive in nature and used a survey research methodology. Participants included school staff, parents, and students from four secondary schools in suburban areas in Utah. These schools have been participating in an ongoing university-public school partnership. All school staff and students in these schools were given the

opportunity to participate in the survey. Parent surveys were sent home with the students to be completed. Student participants consisted of those attending 6th through 9th grades in four schools, two middle schools (grades 6 and 7) and two junior high schools (grades 8 and 9). Table 1 delineates the total student population of the four schools with demographics including gender, ethnicity, free or reduced lunch, and the number in special education programs. Self-reported student demographics taken from the student surveys are included in the results section of this paper along with the relevant analyses.

<Insert Table 1 about here>

Materials

For purposes of this study, school quality was defined by and measured with the *Indicators of School Quality* (ISQ; Taylor, West & Smith, 2006). This instrument was chosen because it is relatively easy to administer and interpret, and because it assesses many of the aforementioned elements of school quality and effectiveness. This study also provided an opportunity to examine validity and reliability evidence for this relatively new measure. Additionally, the ISQ could be readily examined for potential differences in stakeholder perceptions (e.g., between student, parent and staff forms of the survey). The ISQ has also been endorsed by the Northwest Association of Accredited Schools as "the preferred school self-assessment tool" (http://www.csf.usu.edu/ISQ.html).

The ISQ is comprised of three parallel surveys (parent, student, and staff forms) which target three different stakeholder groups in the school community. Each form addresses seven core domains, which are comprised of four or five theoretically related survey questions. These domains consist of the following: parent support, teacher

excellence, student commitment, school leadership, instructional quality, resource management, and school safety.

Appendix A (used with permission from Taylor et al., 2006) lists specific item content within the seven domains, and indicates which items are included in parent, student, and staff forms ("P" = parent, "T&S" = teachers and staff, "ES" = elementary students, and "SS" = secondary students). Items on the ISQ are rated on a Likert-type scale allowing for five responses from 1 (Strongly Disagree) to 5 (Strongly Agree). The staff and parent forms consist of 30 overlapping school quality items. The teacher form includes one unique item, "Staff has access to enough ongoing training," and the parent form includes the unique item, "Students feel safe traveling to and from school." The student version consists of 24 school quality items which overlap with items on the parent and teacher forms.

ISQ Validity and Reliability

Taylor and colleagues (2006) examined correlations between ISQ domains and academic achievement scores, as well as partial correlations after overall neighborhood risk was accounted for, in order to assess the validity of the scale. The authors reported statistically significant correlations between ISQ items and academic achievement scores after neighborhood risk factors were accounted for. For the 8th grade sample, which is most relevant for the present study, academic achievement scores were correlated ($p <$ .05) with parent perceptions of school safety (r = .40); with staff perceptions of parent support (r = .66), student commitment (r = .60), instructional quality (r = .61), resource management (r = .43), and school safety (r = .40); and with student perceptions of parent support (r = .35), resource management (r = .44), and school safety (r = .54). The items

that produced statistically significant correlations with academic achievement scores varied according to student grade.

Alpha reliability coefficients for the overall ISQ surveys were reported as .93 for students and staff, and .95 for parents from the author's standardized sample. Cronbach's Alpha coefficients were also calculated for the present population and are reported in the results section.

Procedures

All ISQ surveys were prepared and scored by the Center for the School of the Future (CSF) at Utah State University. Each school in this study notified CSF of the number of expected participants. A survey kit containing a contents checklist, instructions for conducting ISQ, the ISQ forms, and a return address label was sent to each school. All surveys were completed anonymously.

For this study the participating schools administered the ISQ in the spring of the years 2004, 2005, and 2006, and returned the completed forms to CSF for analysis. CSF typically returns a results summary to administrators using "Signal Analysis," a report that uses different colors to summarize the ISQ results (see, www.csf.usu.edu for examples). However, for the present study, raw numerical data was also supplied by CSF for statistical analyses.

Staff surveys. Principals gave a verbal announcement to school staff and teachers informing them of the receipt of the ISQ surveys, and enlisted teacher cooperation to complete them. Principals encouraged school staff and teachers to complete the surveys and emphasized the potential benefits for the school from the data they would receive at the end of the process.

Parent surveys. Parent surveys were sent home with the students. Each household was provided one parent survey regardless of the number of children attending the school. After parents completed the surveys the forms were sent in a sealed envelope back to school and then sent to the CSF office with the rest of the ISQ surveys.

Student surveys. Students were instructed by teachers to complete the ISQ surveys during the school day. Instructions were read to the class by the teachers. Students took the needed time—which was estimated to be on average 10 minutes for secondary students—during the school day to complete the surveys. All completed surveys were then collected by the teacher and shipped, along with the staff and parent forms, to the CSF office for analysis.

Data Analysis

The data was analyzed quantitatively using SPSS. Response rates were calculated for each respondent group (student, parents, and school staff) across the three years. Cronbach's alphas were calculated to examine reliability of each form of the survey. T-tests and ANOVAs were conducted for comparisons of parent, staff, and student ratings. Further comparisons between groups of students included gender, grade, and ethnicity comparisons. Due to the small number of non-teaching staff participating in the surveys, all school staff members (administrators, teachers, and other school staff) were considered as a group.

Results

Response rates for this study varied considerably by respondent group. Parent response rates for the three years ranged from 24% to 36% with a mean of 30%. Student rates ranged from 76% to 78% with a mean of 78%. School staff rates ranged from 67%

to 81% with a mean of 76%. Student and staff response rates were higher possibly because, for these groups, the ISQ was completed at school. Students took ISQ forms home for parents to complete which allowed for an increased possibility of lost forms and decreased administrator supervision of the process. Parent and staff response rates dropped the second year and rose for the third. The reasons for this variation are unknown.

Overall reliability (Cronbach's alpha) of each of the forms was calculated for this study resulting in high reliability coefficients (.92 for the student form, .93 for the staff form, and .95 for the parent form). Since the seven domains include fewer items, it is not surprising that reliability coefficients are lower for the domains than for the overall measure. Differences in reliability were found among the domains. For this study, alpha coefficients for the seven domains ranged from .60 to .76 for students, .66 to .90 for teachers, and .70 to .91 for parents. For all respondent groups, the Parent Support domain yielded the lowest reliabilities, and the School Leadership domain yielded the highest. The student form yielded the lowest reliabilities in comparison with the parent and staff forms, but also had fewer items (24 student items vs. 31 for parent and staff forms).

Parent, Staff and Student Comparisons

ANOVAs were conducted between parent, staff, and student respondent groups for the three years. Comparable versions of 24 of the original 31 ISQ questions shared across these three respondent groups were included in comparisons between these groups. An analysis of the ISQ scores for each of the groups (items that were comparable across the measures were averaged for each group) revealed that there were statistically significant differences in how the groups were responding across the three years (see

Table 2). Post hoc (Tamhane's) tests revealed that overall parents were rating their schools lower than teachers and students ($p < .001$). In the third year, students also rated their schools lower than teachers ($p < .001$).

<Insert Table 2 about here>

In order to examine these differences more closely, ANOVAs were conducted on the seven categories of ISQ responses: parent support, teacher excellence, student commitment, school leadership, instructional quality, resource management and school safety. All of these categories yielded statistically significant differences between the groups across the three years ($p < .01$). However, the patterns of which groups rated the school higher varied by response category (see Table 3).

<Insert Table 3 about here>

Gender

T-test analyses indicated that girls rated their schools higher than boys across the three years, when all items were averaged to obtain a general ISQ score (see Table 4). A closer look at gender differences on the seven ISQ domains of responses revealed that girls consistently rated their schools higher ($p < .01$) in all of these domains the first year. The second and third years, girls rated their schools higher ($p < .05$) on all but the school leadership domain.

<Insert Table 4 about here>

Grade

ANOVAs across the four grades of middle (grades 6 and 7) and junior high school (grades 8 and 9) were also conducted, along with post hoc grade comparisons (Tamhane's). Statistically significant differences were found in student ratings across

grades for all three years of the study such that students in the lower grades tended to rate their schools higher when all items were averaged (see Table 5). Grade comparisons revealed that there were statistically significant decreases in ratings across the middle school grades (6-7), and from middle school to junior high (7-8), but not across the junior high school grades (8-9).

<Insert Table 5 about here>

A closer look at grade differences on the seven ISQ response domains revealed that a similar pattern (of decreased ratings across grades 6-8) held during the first year across domains ($p < .001$), with only one exception: parent support. The parent support domain during the first year yielded higher ratings for 9^{th} graders when compared to 7^{th} graders ($p < .05$). The following two years a similar pattern of statistically significant grade differences held across most of the domains as well ($p < .05$); however, for these years the parent support domain no longer yielded statistically significant differences between grades.

Minority/Majority Status

In listing their ethnicity on the ISQ, students were allowed to indicate more than one ethnic group. The majority of students selected Caucasian only as their ethnic status (approximately 83% of students who provided ethnicity information across the three years). Due to the relatively small percentages of students exclusively selecting various other ethnic categories, these students were compared as a group with majority students. Thus ethnic comparisons for the purposes of this study can be considered a simple majority/minority comparison. Across the three years, students who exclusively selected

the Caucasian category tended to rate their schools higher than other students when all items were averaged (see Table 6).

<Insert Table 6 about here>

A closer look at the seven categories of responses revealed that students who exclusively selected Caucasian for ethnicity typically rated their schools higher on several of these domains. Statistically significant ($p < .05$) comparisons are reported below for each of the three years. For the first year, four of the seven categories yielded statistically significant differences (parent support, student commitment, school leadership, resource management). The second year, statistically significant differences were found between the groups on six of the seven ISQ categories (parent support, student commitment, school leadership, instructional quality, resource management, and school safety). The third year, statistically significant differences were found on five of the seven categories (parent support, student commitment, school leadership, instructional quality, resource management).

Discussion

The purpose of this study was to emphasize the importance of understanding stakeholder perceptions of school quality and to provide an example of how these perceptions might be collected, analyzed, and interpreted. Reliability analyses for this study were also conducted on the ISQ as the measure for perceptions of school quality used in this example. Reliability analyses for the present study suggest that, as a whole, the items on the ISQ are internally consistent. The seven domains yielded lower reliabilities than the ISQ as a whole, but this may be due in part to the relatively small numbers of items (3-5) in each domain.

The results indicate that various response groups in this study did in fact differ in their perceptions of the schools, although effect sizes (*d*), which were calculated for the t-tests, were relatively small. Girls rated the schools higher on average than boys. Students in lower grades tended to rate their schools higher than students in upper grades. Students who selected the majority ethnic category tended to rate their schools higher than other students. Ratings by respondent group (parent, staff, and student) varied according to the question being asked. For example, staff members tended to rate the schools higher than other respondents for most categories of items, however, students rated the parent support and student commitment categories higher than the other respondents.

It is important to note that although the findings in this study indicated that differences exist in perceptions among stakeholders in these schools, the specific findings of this study might not be found in other schools, districts, regions, etc. However, differences found among student response groups in this study might be informative when interpreted in light of previous research (Samdal et al., 1999; Townsend, 1997; Tymms, 2001). As more studies are conducted, it would be particularly beneficial to note whether consistent patterns of differences in perception emerge, and whether these patterns are related to systematic differences in how school systems are serving different stakeholder groups.

The most immediate application for findings such as these, however, would be for the administrators involved in the study to consider what these differences might mean for their schools. This information could be used as a tool in planning for school improvement and promoting stakeholder support of shared goals for the school.

Following are some examples of questions the administrators could ask about what these results might mean for their schools: Do the differences in gender perceptions indicate that girls are better served in some ways in these schools? Similarly, are students in the majority ethnic group at these schools being served better than students that are not of the majority ethnic group? Is there something about being in the upper grades that was less satisfying for these students? Are differences in ratings between staff, students and parents due to differences in how well these groups are being served, different roles in relation to the school, different beliefs and values, lack of communication, or other factors?

Answers to these and other questions, as well as the question of whether stakeholders can do anything to improve these perceptions, might require dialogue with representatives from each of these stakeholder groups. The type of findings represented in this study can provide a starting point for administrators to know who they might need to talk to and what questions they might need to ask. Specifically administrators can gain access through survey research for discovering stakeholder perceptions about strengths and deficits in school quality and in finding out where differences of opinion are greatest. Comparisons of stakeholder perceptions can serve as a “red flag” that indicates where to start digging in the search for meaningful school improvement and stakeholder collaboration.

One way to begin to find answers to these questions is to take a closer look at the specific domains within the survey. A closer examination of parent, staff, and student ratings on the seven ISQ categories in this study revealed a fairly predictable pattern, which was also consistent with expectations from previous research (Townsend, 1997).

School staff rated the school quality higher than parents and students in the categories over which they theoretically had the greatest control: Teacher excellence, school leadership, instructional quality, resource management and school safety. Students rated the school higher on the domain they had the most control over: student commitment. Interestingly, students also provided the highest ratings for the parent support category. These differences found in stakeholder ratings among the seven categories of items might represent biases due to different roles, or they might represent privileged information that each group has about their own efforts. Either way, these differences likely indicate a need for better communication on these topics between stakeholder groups.

In addition to quantitatively exploring similarities and differences between stakeholder ratings, these questions might be answered more thoroughly through additional qualitative research. An initial review and comparison of survey results can provide impetus and structure for later, more in depth, qualitative inquiry. For example, interviews and focus groups might be conducted with parents to explore the question of whether their lower ratings of school quality reflect lack of school-home communication or perceptions of other specific problems at the school, such as grounds supervision before and after school.

Limitations and future research

The current study was intended as a descriptive example of the potential benefits of exploring stakeholder perceptions. Although it appears that differences existed in the perceptions of the stakeholders who participated in this study, we cannot draw conclusions about the reasons those differences occurred without further exploration. The schools included in this study also represent only a limited geographic area. The vast

majority of students in the study were self-identified as Caucasian, and the areas included in the study were typically suburban. Thus, generalization of these findings outside of the region, ethnic majority, or settings of this study is limited.

However for administrators working toward improvement within specific schools, districts, or regions; a careful of consideration and comparison of stakeholders' perceptions within those schools, district, or regions is recommended as a potential resource for providing data-based information to aid in planning school-wide interventions. Surveys of stakeholder perceptions might also be useful as outcome measures of school quality and effectiveness.

In conclusion, the measurement and comparison of perceptions of school quality can provide useful information to administrators about where to begin making improvements in the schools, and where more in-depth exploration is needed. Surveys of stakeholder perceptions could also provide evidence of the effectiveness of interventions. This information could prove valuable to administrators who wish to improve the quality of their schools.

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Table 1

Demographics of Students Enrolled in the Four Schools across Three Years (2004-2006)

	Year					
	2004		2005		2006	
	n	%	n	%	n	%
Number of Students	4758		4874		4818	
Gender						
Male	2488	52	2547	52	2479	51
Female	2270	48	2327	48	2339	49
Ethnicity						
Caucasian	4346	91	4447	91	4340	90
Hispanic	301	6	308	6	356	7
African American	23	<1	29	<1	27	<1
Asian	17	<1	15	<1	16	<1
Pacific Islander	35	1	38	1	31	1
Native American	36	1	37	1	48	1
Special Education	536	11	528	11	495	10
Reduced Lunch	1407	30	1331	27	1429	30

Table 2

ANOVA and Post Hoc Response Group Comparisons of Overall ISQ Means

Year	N				
	Parents	Teachers	Students	*F*	Group Comparisons (Tamhane's)
2004	1104	149	3130	46.03*	T, S > P
2005	889	150	3208	18.02*	T, S > P
2006	1300	179	2987	25.59*	T > S > P

Note 1: P, T, and S represent Parent, Teacher (Staff), and Student groups respectively.

Note 2: *All comparisons including the symbol ">" indicate that the group preceding the symbol rated their school higher. These comparisons yielded statistically significant differences ($p < .001$).

Table 3

Post Hoc Response Group Comparisons of ISQ Category Means

	2004	2005	2006
Parent Support	S > P, T	S > P, T	S > P, T
Teacher Excellence	T > S > P	T > S > P	T > P, S
Student Commitment	S > T, P	S > T, P	S > T > P
School Leadership	T > P > S	T > P > S	T > P > S
Instructional Quality	T > S > P	T > S, P	T > S, P
Resource Management	T, S > P	T, S > P	T, S > P
School Safety	T > P, S	T > P > S	T > P > S

Note 1: P, T, and S represent Parent, Teacher (Staff), and Student groups respectively.

Note 2: All comparisons including the symbol ">" indicate that the group preceding the symbol rated their school higher. These comparisons yielded statistically significant differences ($p < .05$).

Table 4

T-test Gender Comparisons of Overall ISQ Means

Year	Female		Male				
	M	*SD*	*M*	*SD*	*df*	*t*	*d*
2004	3.91	.57	3.78	.61	2697	5.89*	.16
2005	3.89	.59	3.79	.66	2758	4.14*	.11
2006	3.91	.59	3.81	.64	2554	4.01*	.11

*$p < .001$

Table 5

ANOVA and Grade Comparisons for Overall ISQ Means

Year	N						
	6th	7th	8th	9th	*F*	Grade Comparisons (Tamhane's)	
2004	779	539	820	790	41.65*	6 > 7,8,9	7 > 8
2005	923	801	689	588	64.22*	6 > 7,8,9	7 > 8,9
2006	879	769	559	581	55.29*	6 > 7,8,9	7 > 8,9

Note: *All comparisons including the symbol ">" indicate that the group preceding the symbol rated their school higher. These comparisons yielded statistically significant differences ($p < .001$).

Table 6

T-test Majority/Minority Comparisons of Overall ISQ Means

Year	Minority		Majority				
	M	*SD*	*M*	*SD*	*df*	*t*	*d*
2004	3.74	.67	3.85	.58	608	-3.30*	-.07
2005	3.71	.71	3.87	.61	631	-4.47**	-.10
2006	3.76	.66	3.87	.61	649	-3.23*	-.07

*$p < .01$, **$p < .001$

Appendix A

ISQ School Learning Environment Items by Respondent Audience

	P	T&S	ES	SS
Parent Support				
Parents support their child's education	X	X	X	X
Parents know what happens at school	X	X	X	X
Enough parents participate at parent/teacher conferences	X	X		
Parents support extracurricular activities	X	X		X
Teacher Excellence				
Teachers are knowledgeable about the subjects they teach	X	X		
Teachers care about students as individuals	X	X	X	X
Teachers promote good behavior in their classrooms	X	X		X
Teachers are well organized	X	X		
Teachers enjoy teaching	X	X	X	X
Student Commitment				
Students are well behaved	X	X	X	X
Enough students participate in extracurricular activities	X	X		X
Students enjoy learning	X	X	X	X
Students have pride in their school	X	X		X
School Leadership				
Administration is accessible to parents, students, and staff	X	X	X	X
Administration promotes quality instruction	X	X		
Administration is well organized	X	X		
Administration promotes good behavior at the school	X	X	X	X
Administration has high expectations for all students	X	X		X
Instructional Quality				
This school prepares students for adult life	X	X		X
This school provides a quality education	X	X	X	X
Instruction at this school is innovative	X	X		
Instruction at this school challenges students	X	X	X	X
Resource Management				
Staff has access to enough ongoing training		X		
Counselors are accessible to students	X	X		X
Students have adequate computer access	X	X	X	X
The school has quality textbooks and instructional materials	X	X	X	X
Students have enough extracurricular opportunities	X	X		X
School Safety				
Students and staff feel safe at school	X	X	X	X
Students feel safe traveling to and from school	X		X	X
The school is clean and in good repair	X	X		X
The school grounds and hallways are well supervised	X	X		X