

The Research Alliance for New York City Schools

Strengthening Assessments of School Climate: Lessons from the NYC School Survey

To what extent do you feel supported by your principal?
Most students in my school treat teachers with respect.
My child is safe at school.
School leaders communicate a clear vision for this school. My school has high expectations for all students.
I am safe in my classes. The school contacts me about my child's achievements and successes.
My school is kept clean. Most students in my school just look out for themselves.
Teachers in my school trust each other.
My child is learning what he or she needs to know to succeed in later grades.
Discipline in my school is fair. **My teachers inspire me to learn.**
My child's teachers give helpful comments on classwork and tests.
I have sufficient materials to teach my classes.
I feel welcome in my child's school.

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STRENGTHENING ASSESSMENTS OF SCHOOL CLIMATE: LESSONS FROM THE NYC SCHOOL SURVEY

More and more cities and states are using surveys to collect information about school climate from students, teachers and parents. These surveys have the potential to shed light on critical aspects of the learning environment, and they are being incorporated into a growing number of public and privately funded education initiatives. The US Department of Education’s Safe and Supportive School grants, for example, support survey efforts in 11 states, which are gathering input about student engagement and safety, among other issues.¹

The Research Alliance for New York City Schools has been working with the NYC Department of Education (DOE) to review and enhance its School Survey—the largest in the nation—since 2010. This work has resulted in several concrete improvements to the NYC School Survey, and has pointed to a variety of lessons for other cities that are engaged in similar efforts. This brief summarizes our findings to date (which are explored in more depth in a technical paper available on our website²), and presents both the Research Alliance’s and the DOE’s reflections about the process of improving the School Survey. It outlines the Research Alliance’s specific recommendations for changes to the NYC School Survey and next steps for analysis and improvement, as well as a set of broader lessons that have emerged from our work. For more information about our ongoing research on the NYC School Survey, please visit our website: www.ranycs.org.

About the NYC School Survey

Each spring, the DOE invites all public school students in grades 6 through 12, as well as parents and teachers throughout the City to complete the School Survey. In 2012, 476,567 parents, 428,327 students, and 62,115 teachers completed the NYC School Survey. The survey is designed to elicit input about the environment at each school, including Academic Expectations, Communication, Engagement, and Safety & Respect, which together constitute the School Environment score on the Progress Report. School Survey information contributes 10-15 percent (depending on school type) to each school’s annual Progress Report grade. It is also intended to “support a dialogue among all members of the school community about how to make the

school a better place to learn” and to help school leaders “better understand their own school's strengths and target areas for improvement.”³

When the DOE began to develop the School Survey in 2006, it collaborated with a range of stakeholders in NYC public education, including researchers, community-based organizations, educators, parents, and internal DOE staff. It built on the survey development work of the University of Chicago Consortium on Chicago School Research (CCSR—see “Research-Practice Partnerships” textbox on page 5 for more information). The DOE incorporated some items from CCSR surveys and from other well-established surveys and also created items specific to NYC schools.

The NYC Survey's Census Approach

A common approach to survey research is to sample from the total population, randomly selecting a subgroup of survey respondents from the total pool of respondents. However, the NYC DOE uses a census approach that asks *all* parents, students in grades 6-12, and teachers to complete the survey. NYC public schools employ over 80,000 teachers and serve more than 1.1 million students (and by extension, their parents). This makes the NYC School Survey one of the largest surveys in the country, second in size only to the US census. The DOE uses the approach to fulfill its goals of engaging the whole school community and soliciting feedback from all constituents.

The NYC School Survey represents a major investment of resources and time for schools and the district as a whole. School Survey scores, combined with attendance, are the only non-academic indicators used in the City's Progress Reports, which in turn are the primary way the DOE evaluates overall school quality. It is also the sole source of community feedback in the Progress Report.

Given the high stakes nature of the survey, establishing the reliability and validity of the measures is critical. Reliability describes the extent to which the measures remain consistent under varying conditions—for example, do two parents from different schools who feel the same about the quality of the school environment respond to the survey items similarly? In contrast, validity refers to how well a measure represents the intended idea—for example, does a school with a high score on the School Survey actually have a high-quality learning environment?

Rockoff and Speroni conducted a preliminary assessment of the reliability and validity of the 2008 School Survey. This initial look found high levels of reliability for the four categories reported on Progress Reports and mixed validity evidence.⁴

DOE officials were interested in continuing to develop and improve the survey, but due to the firewall protecting respondents' confidentiality, they did not have access to the individual-level data required for such analysis. The Research Alliance was a natural partner, because of our unique position to access the information needed—and the capacity to analyze data from such a large-scale survey. In 2010, the Research Alliance began work on the NYC School Survey, with the goal of examining the reliability and validity of the measures over time.

Using data from the 2008, 2009 and 2010 survey administrations,⁵ we undertook a systematic examination designed to assess how well the School Survey was capturing key stakeholders' experiences and to inform potential improvements to the survey. We worked closely with the DOE to understand the survey's context and goals and ultimately made a number of recommendations about how the survey could be improved. As outlined in the "Next Steps" textbox on page 8, we are continuing to work with the DOE to make the survey more effective. The major findings to date are summarized below.

Findings About the NYC School Survey

Our analysis of three years of School Survey data revealed several important findings about the generalizability of survey results and the reliability and validity of the survey measures:

Response Rates. Robust response rates for students and teachers demonstrate widespread participation, a key strength of the NYC School Survey. Response rates among students and teachers increased steadily over time and reached 78 percent and 83 percent, respectively, in 2010. These high response rates offer confidence that survey results reflect the opinions of the broader population. Parent response rates (49 percent in 2010 and 53 percent in 2012) did not approach the same levels as student and teacher response rates, and thus the representativeness of parent survey results is more in question. However, it is important to consider that, historically, response rates for parent surveys in large school districts have been low (an estimated 30 percent for similar district-sponsored surveys⁶). By comparison, the parent response rate in NYC is high. The district has made it a priority to increase parent response rates, which have risen steadily over time. These positive trends in parent response rates are encouraging.

Reporting Categories. The NYC School Survey is complex in nature. The survey includes items that map to four predefined reporting categories (Academic Expectations, Communication, Engagement, and Safety & Respect) for three different reporters (parents, students, and teachers). Therefore, we examined the School Survey from many angles—deconstructing responses by reporting categories, respondents, and individuals within schools—to fully understand each component. Through this process, we replicated DOE’s four reporting categories and evaluated their ability to empirically measure different aspects of a school’s learning environment. In this work we were primarily interested in examining whether a construct like Academic Expectations was statistically distinct from another construct, such as Engagement, or if the two reporting categories were actually capturing a larger global perception of the school environment.

Research-Practice Partnerships

Research-practice partnerships are designed to better position research to contribute to improving outcomes for students and schools by forming ongoing, collaborative relationships between researchers and school districts.* These partnerships come in different shapes and sizes, depending on the needs of the school district and the capacity and interests of the involved research organization. Since 2008, the Research Alliance for New York City Schools has worked with the NYC DOE to conduct rigorous research on topics that matter to the City’s public schools. Our role in analyzing the NYC School Survey offers one example of the unique and important work that is possible through research-practice partnerships.

The Research Alliance was modeled after the University of Chicago Consortium on Chicago School Research (CCSR), which was founded in 1990 as a partnership between researchers from the University of Chicago, officials from Chicago Public Schools, and other stakeholders in Chicago. One of CCSR’s key contributions to the field has been the *My Voice/My School Surveys*, administered biennially to principals, students, and teachers in Chicago Public Schools. The surveys have gathered invaluable information about Chicago’s schools, and the resulting data and analyses have become influential in local and national school improvement and reform efforts. The DOE built on CCSR’s work as it developed a School Survey for New York City.

In recent years, CCSR and the Research Alliance for New York City Schools have been joined by a growing number of research-practice partnerships in other cities, including the Baltimore Education Research Consortium and the Newark Schools Research Collaborative. These collaborations are relatively new. Moving forward, we will continue to document lessons and insights emerging from our work—and from our unique role as both a partner and evaluator of local school district efforts.

* See Coburn et al., 2013.

Our analysis revealed three key findings:

- The existing School Survey items did provide statistically reliable indicators of the DOE's four reporting categories. In other words, responses to the individual survey items used to create each of these measures were highly correlated with one another.
- However, the four reporting category measures were statistically indistinguishable from each other. For the purposes of the school Progress Reports, this means that the survey items used to create the individual measures could be combined into a single "school environment" measure without significantly diminishing the current breadth of information about schools.
- Because many of the items were so highly correlated with one another, the single global measure of the school environment could be constructed reliably using about half of the items currently being used to construct the four individual measures.

Reporters. Although the reporting categories were not empirically different from one another, the three respondent groups were distinct. This suggests that the School Survey tapped into parents', students', and teachers' unique perspectives about the school environment. In fact, a single school environment score for each respondent group may provide richer information about a school than four reporting category scores that combine respondents' answers.

Distinguishing Between Schools. Overall, the four reporting category scores were not strong measures for distinguishing among schools. In other words, the survey provides more information about differences between individuals within a school, and less information about how that school differs from other schools. When we examined reporting category scores *by respondent*, we found that teachers' responses were best able to distinguish between schools. Taken together, these results suggest that School Survey scores could be combined in ways that take into account the unique perspectives of each respondent group. For example, weighting teachers' scores more heavily in the overall School Environment score on the Progress Report may be prudent, given that teachers' reporting category scores more reliably distinguish between schools than parent and student scores.

Associations with School Outcomes. School Survey scores were significantly associated with other policy-relevant school characteristics, including student test scores and graduation rates. However, these associations were not consistent across years and reporters. Inconsistent associations over time add to the difficulty of summarizing how the School Survey relates to other school characteristics. When there were significant associations, relatively large differences in School Survey scores were associated with relatively small differences in test scores. For high school outcomes, differences in School Survey scores were associated with small but meaningful differences in the percent of students “on track” to graduate. This suggests that by improving aspects of the school environment in high schools, there is the potential to increase the percent of students who are on track and ultimately graduate.

Recommendations

The universal administration of the NYC School Survey and its corresponding high response rates present an opportunity to accomplish a wide range of goals that the DOE and other school systems increasingly see as a priority. These goals include giving parents, students, and teachers a voice in assessing the quality of their schools, providing information that can be used for school improvement efforts, and constructing climate measures for which schools may be held accountable. Findings from the Research Alliance’s analyses suggest, however, that some of this potential remains untapped in NYC. The Research Alliance has made the following recommendations to the DOE, which are intended to increase the utility of the School Survey and incrementally improve the measures. See the “Policymaker Perspective” section for information about how these recommendations have been utilized.

- Eliminate redundant items that are used to create the school environment measures, while preserving the reliability of those measures.

Next Steps

The Research Alliance for NYC Schools and the DOE are engaged in an ongoing collaboration to further develop the parent, student, and teacher School Surveys. In the coming months, we will continue the cycle of analysis, revisions, and reanalysis with the shared goal of improving the quality of information available about NYC’s schools. For example, the Research Alliance is working to validate new measures from the teacher survey. In addition, the DOE is continuing to consider revisions to the way School Surveys are scored and reported for the Progress Report.

- Reduce the time required to complete the School Survey and improve the reliability of measures by creating more consistent question formats and response categories.
- Choose different and separate measures for the parent, student, and teacher surveys to capitalize on their distinctive perspectives on their schools. Limit or eliminate measures that combine responses from parent, student, and teacher surveys. For example, although teachers may be the best reporters of Academic Expectations, parents and students may have unique and important views on Safety & Respect.
- Incorporate new school environment measures that are more likely to distinguish between schools and are associated with other school performance indicators. For example, ask teachers to report about their principal's instructional leadership.
- Incorporate measures that more effectively gauge parent satisfaction and engagement with their child's school. For example, items like "I would recommend this school to other parents" tap into parents' overall satisfaction.

Lessons for Other School Survey Efforts

In addition to the specific recommendations outlined above, our work also suggests a number of larger lessons for other cities that are developing school surveys.

- **Researchers should be brought into the process early.** Incorporating the best thinking on survey development—including expertise in rating-scale construction, diverse survey respondents (e.g., adolescents, people from different cultural backgrounds, low literacy), sampling frame, scoring procedures, and school-level measurement across elementary, middle, and high school—is important to create a survey that accurately reflects people's experiences in schools. Having a long-term research partner can help ensure that surveys use rigorous, well-tested measures and methods and that they address areas established as important in previous research about school climate.
- **A continuous improvement approach to school surveys is critical.** States and local school districts should examine survey results and

implementation experiences and work to make surveys better with each iteration. Although this will likely pose a challenge to examining measures over time, it is helpful to engage in an ongoing survey improvement process where small incremental changes are made and pilot tested on a yearly basis. Based on results of pilot tests, future surveys can integrate new questions and possibly eliminate redundant items.

- **Measures of the school environment should be given more weight in accountability efforts.** The NYC School Survey results contribute a small portion to the annual Progress Report grade issued to every school. The CCSR surveys are not currently used for accountability purposes, although there has been some consideration of doing so.⁷ If good measures of school climate are used, they represent an important aspect of educators' work and effectiveness. There is good and growing evidence that a school's environment, including safety and student and family engagement, is important for improving academic outcomes.⁸
- **Policymakers at multiple levels should consider using their school survey to collect additional kinds of data that could help assess student needs and progress.** For example, nonacademic outcomes like motivation, academic aspirations, and problem solving are increasingly viewed as important to students' success in school and in life. Schools surveys could incorporate questions about these kinds of student outcomes, offering valuable information about how schools may be influencing these important nonacademic domains.
- **Finally, surveys might be used to collect information on teacher quality from students.** Ongoing research has shown that students' ratings tend to track closely with other ways of evaluating teachers, such as student test score gains, direct classroom observations, and videotaped observations of teacher practice.⁹ It may make sense to integrate student ratings, collected through a school survey, as a small part of teacher evaluation systems.

Surely, continuing work in NYC and around the country will generate additional lessons in years to come. In the meantime, it is encouraging that so many districts have begun using surveys to engage members of the school community. Capturing

the perspectives of parents, students, and teachers is vital for evaluating and improving the nation's schools.

POLICYMAKER PERSPECTIVE

As the largest annual survey in the country, the NYC School Survey is a powerful tool that helps the NYC Department of Education (DOE) and school communities learn what parents, teachers, and students in grades 6-12 think about their school's learning environment. Survey results are published on the DOE's website, and each school is issued a survey report that school leaders, students, and families can use to facilitate a dialogue about the school environment and how to make the school a better place to learn. Importantly, because School Survey results account for 10 to 15 percent of a school's Progress Report grade, the DOE must balance the interests of obtaining actionable data for schools and differentiating data that can be used as part of our accountability system.

On an operational level, our partnership with the Research Alliance has been critical to implementing the School Survey. Due to the confidential nature of the parent and student surveys, the DOE cannot analyze respondent level data. However, as an independent entity, the Research Alliance is able to conduct these analyses and share the results with the DOE while preserving the School Survey's confidentiality.

In addition, the Research Alliance's years of studying our education system has resulted in a deep understanding of the complex issues facing our schools. This background helps inform the Research Alliance's perspective regarding the School Survey's content, scoring, and use. Further, the Research Alliance synthesizes survey data, research, and expert analyses from around the country that the DOE uses as part of its annual survey review process. All of this information helps us understand the utility of existing survey questions and the impact of changing, adding, and removing questions.

In response to the Research Alliance's feedback and our own assessment of how certain changes would impact schools and other stakeholders who use survey results to help inform program-related decisions, the DOE has made a number of significant changes to the School Survey. For example, last year we piloted a set of test questions on the teacher survey that were recommended by the Research Alliance. Based on the Research Alliance's analysis of these questions, we have incorporated a number of them into the 2012-13 teacher survey with the goal of obtaining data that better measures school performance indicators. We also revised the 2012-13 parent and student surveys based on the Research Alliance's

recommendations by removing redundant items and adding new items. For example, we added improved questions about engagement and satisfaction levels to the parent survey, as well as a set of non-scored questions about self-efficacy to the student survey. We also streamlined the format and structure of all three surveys in an effort to make the surveys more accessible and user-friendly.

The Research Alliance brings a strong academic lens to the analysis of survey results. However, as a school district, we must consider a number of factors in designing the survey in order to get actionable information that can be used for school accountability. Most fundamentally, survey questions need to focus on conditions that are within the control of the school and that measure the school as a whole—a perspective shared by the Research Alliance. Further, we seek and incorporate stakeholder feedback into the survey revision process to ensure our accountability system produces an accurate picture of school quality. For example, we engage a range of DOE programs and teams to learn how they use the survey. Teacher and parent advocacy groups also provide feedback about survey content that is important to them. These sources of feedback are not always consistent with one another, and it is not possible to accommodate every request in a brief survey. Similarly, with respect to the Research Alliance’s recommendation to shift to a respondent-based scoring model, the DOE must consider how such a change would affect the way school communities understand, interpret, and use survey results. These are just some examples of the diverse set of interests and concerns the DOE must balance as a part of an ongoing survey revision process.

In addition, our objective is not solely to produce survey results that are correlated with other school performance indicators, such as student test scores and graduation rates. We have purposefully incorporated diverse measures of school quality into our accountability system—namely, the Progress Report, Quality Review, and School Survey—with the goal of capturing a broad and rich picture of schools’ strengths and weaknesses. We believe that parents’ evaluations of schools draw on aspects of school quality beyond the information we capture through test scores, classroom observations, and other data streams. Since no one score or grade can fully reflect every nuance of school performance, these accountability tools are designed to provide families and school communities with multiple, and varied, data points on a school. We work hard to ensure that families understand these data

points and use them to make informed decisions about where to send their child to school.

The DOE will continue to refine all three versions of the School Survey in light of the Research Alliance's subsequent analyses and recommendations. In addition, we are currently reviewing the Research Alliance's recommendations regarding the scoring of the School Survey results for accountability purposes. We look forward to continued collaboration with the Research Alliance as we work to strengthen one of our most valuable feedback and accountability tools.

Notes

¹ See the Safe and Supportive Schools website:
<http://safesupportiveschools.ed.gov/index.php?id=133>. See also Shah (2013).

² Nathanson et al. (2013).

³ NYC DOE (2013).

⁴ Rockoff & Speroni (2008).

⁵ Because the Survey underwent significant changes during the first two years of administration, we decided to make 2008—the first year that the survey exhibited continuity with future administrative years—the base year for our analysis.

⁶ We drew several comparisons to place NYC School Survey parent response rates in context. Austin (2011) estimated that typical parent response rates for district-sponsored paper surveys is 30 percent and noted that NYC DOE made a heavy investment in public relations outreach to get parent response rates to 45 percent in the 2009 School Survey administration.

Other examples suggest even lower rates: A Cincinnati Public Schools news release reported an 8 percent parent response rate in 2012. And, based on a 2008 report about a Los Angeles Unified School District parent survey, we estimated that 22 percent of the 15,000 parents who received a survey responded (the response rate was not directly reported in the paper, and we based our estimate on Tables 1 and 2, which reported the number of responses to two specific survey items.)

⁷ Easton et al. (2008).

⁸ Center for Social and Emotional Education (2010); Cohen et al. (2009); Zins et al. (2004).

⁹ Camburn (2012).

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