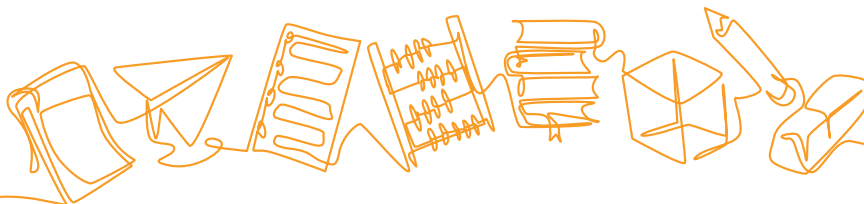




# Design & Methodology

## Family and Staff Surveys | 2023





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YouthTruth is a national nonprofit that harnesses student and stakeholder perceptions to help educators accelerate improvements. Through validated survey instruments and tailored advisory services, YouthTruth partners with schools, districts, states, and educational funders to enhance learning for all students. Founded in 2008 by the Center for Effective Philanthropy (CEP), YouthTruth began as a tool for gathering feedback from students. During the 2015-16 school year, in response to increasing demand from our partners, we embarked on a year-long process to develop, test, and refine survey instruments designed to gather family and staff feedback. Further information about the YouthTruth Student Surveys is detailed here.

After gathering candid survey feedback from students, family, and staff members, we rigorously analyze and report on the resulting quantitative and qualitative data in a robust, online interactive reporting platform. Through these services, YouthTruth surveys provide a cost-effective, rigorous, and meaningful way to inform data-driven practices, school improvement plans, and targeted professional development.

To learn more about the Student Survey, please refer to our Student Survey Design & Methodology report.

YouthTruth partners may also customize the surveys with Additional Topics:

- » Distance Learning\*
- » Diversity, Equity & Inclusion (DEI)

*All topics are also available in a Student Survey version. Please see "Survey History & Development" for more information about the development of these Additional Topics.*

This document provides an overview of YouthTruth's student surveys and reporting products, and technical documentation regarding:

- » Survey development, design, and administration.
- » Data processing and analysis procedures.
- » Data reliability and validity.
- » Findings from existing survey data.

This document is designed for district and school leaders, researchers, program evaluators, and other parties interested in using validated student and stakeholder survey instruments to help districts, schools, and teachers improve or to evaluate the effects of programs, professional development, or interventions.

Finally, this document shares large portions of YouthTruth's survey instruments but does not represent the full survey instrument. Please note that survey content cannot be used without the expressed permission of YouthTruth.

**In partnering with YouthTruth, partners can survey Pre-K through 12th grade family and staff stakeholders using YouthTruth Surveys:**

The YouthTruth Family and Staff surveys are primarily used as a climate and culture instrument, as they gather feedback from stakeholders about their overall experiences with their schools. The Family Survey focus on: Engagement, Culture, Relationships, School Safety, Communication & Feedback, and Resources. The Staff Survey focuses on: Engagement, Culture, Relationships, School Safety and Professional Development & Support. Results are reported at the school and district level.

## VALUE OF STAKEHOLDER SURVEYS

The perceptions of stakeholders are critical factors in evaluating the effectiveness of systems, programs, and interventions. Recently, there has been growing interest in making better use of beneficiary and stakeholder perceptions in program improvement.<sup>1</sup> The use of stakeholder perception data – from family members and school staff, in this case – leads to a more nuanced understanding of organizational effectiveness.

Furthermore, inviting family members to share their perspectives and valuing their input can support family engagement efforts, which have been shown to contribute to a range of elements of student achievement including increased attendance, improved grades and social skills.<sup>2,3</sup>

Research suggests that efforts to improve school culture and student achievement should be informed by family and staff perceptions as well as student perceptions.<sup>4,5</sup> Making informed decisions requires hearing diverse perspectives from these integral groups of stakeholders.

While test scores and teacher value-added measures can be useful in measuring overall performance, it can be difficult to act on these measures because they are often reported after the student has left the classroom and because they offer little guidance about how to improve. Feedback from family and staff members can serve as an actionable, real-time barometer of factors that influence student success.

Finally, in comparison to academic assessments or classroom observations, surveys are cost-effective and easy to implement. For instance, some districts have found that surveys cost one-sixth as much to implement per pupil as classroom observations or value-added estimates.<sup>6</sup>

## SURVEY HISTORY & DEVELOPMENT

YouthTruth's Family and Staff surveys ask questions that focus on critical areas of school experience, as perceived by these two key stakeholder groups. YouthTruth began the development process for these companion surveys in fall 2015, prompted by growing demand over the years from our school and district/CMO partners. They expressed an interest in having survey tools to gather feedback from family and staff members in a way that would complement the student feedback they were receiving through YouthTruth. We spent a full year developing, testing, and refining the instruments, and formally launched our Family and Staff Surveys in fall 2016.

In developing our Family and Staff surveys, we sought to create instruments that could fill a unique space in the market by:

- » Offering survey tools and robust reports that complement YouthTruth Student Surveys – asking some overlapping questions across stakeholder groups, but also allowing for divergent questions delving into the areas about which each stakeholder group has unique insights;
- » Focusing primarily on feedback about family and staff members' direct experiences with their school, rather than asking them to report on what others are thinking or experiencing; and
- » Focusing primarily on aspects of the school experience that administrators can improve or refine based on feedback, rather than focusing on questions about staffs' or families' lives outside of school.

In developing our pilot survey instruments, we completed a comprehensive review of the field of stakeholder surveys including more than 10 existing survey instruments. We used this review to inform the initial construct development, in addition to drawing on CEP's existing well-validated Staff Survey and YouthTruth's previous work with student surveys. We also referenced the "lifeworld" framework and approach to school culture, community, and people.<sup>7</sup> Based on this review, as well as informal feedback from practitioners, we developed six preliminary constructs and conceptual definitions for the pilot Family and Staff Survey instruments. Operational definitions (items) were developed along with a corresponding scaling technique. To align with the preexisting student survey, the Likert summated rating was selected as the scaling technique for both instruments.

Prior to fielding a pilot survey, we undertook a content validation process involving multiple stakeholders. Validity evidence was obtained from an analysis of the relationship between the content of the survey and the constructs they intend to measure. This evidence was collected through a judgmental review of the items. Content experts – including educational researchers, superintendents, principals, teachers, and parents – were asked to provide both structured and unstructured feedback on 1) the adequacy of the content coverage, 2) the clarity of the content coverage, 3) the relevance of the item content, and 4) the wording and structure of the items through a structured.<sup>8</sup> The results were also used to modify or remove problematic items identified by the content experts.

The resulting pilot survey instrument was tested in spring 2016. Fourteen schools participated in the Staff Survey pilot, yielding 312 responses, and 16 schools participated in the Family Survey pilot, yielding 885 responses. Throughout the pilot, we gathered feedback from district leaders, school leaders, and survey respondents about survey administration process and communication preferences.

In the final stage of the development process, we gathered evidence on the internal structure of the instrument and refined the instrument accordingly. The Standards for Educational and Psychological Testing states that “analyses of the internal structure can indicate the degree to which the relationships among [survey] items and [survey] components conform to the construct on which the proposed [survey] score interpretations are based.”<sup>9</sup> The evidence based on internal structure was gathered through exploratory and confirmatory factor analyses. Exploratory factor analysis helped to determine the factor structure of the instruments.

For both the Family Survey and Staff Survey, the results of the exploratory factor analysis were compared to the results of the judgment reviewed constructs. At the conclusion of the comparison, the constructs were refined. Confirmatory factor analysis helped to determine the final version of the instrument that was consistent and stable. The confirmatory factor analysis also provided an opportunity to collect evidence based on relationships to other variables (i.e. discriminant validity) as well as estimates of the subscale reliabilities.

Results of this analysis are detailed in Appendix Tables 3, 4 and 5. Appendix Tables 1 and 2 list all the questions of each survey.

## SUPPLEMENTAL SURVEY CONTENT

In addition to the core survey themes listed on page 3 and referenced throughout this report, the following survey content is also available.

### Additional Questions Addressed in the YouthTruth Family and Staff Surveys

In addition to the Likert scale questions and factors referenced throughout this report, supplemental questions that address other elements of the school experience appear in Family and Staff Survey. These additional questions collect critical stakeholder perceptions by asking respondents to indicate:

- » Their school's greatest strength and greatest area for improvement, along with the option to comment about both selections.
- » Whether they would recommend this school to a friend or colleague and whether they believe students are getting a high-quality education at this school.
- » The extent to which the COVID-19 pandemic has affected them

### Additional Topics and Customization

YouthTruth also offers clients the opportunity to customize their surveys by adding questions about areas of particular interest. In 2012, we reviewed custom questions previously developed for specific clients, identified themes that garnered broad interest from schools and districts, and developed supplemental content related to these themes. In doing so, we consulted many existing instruments, such as the California Healthy Kids Survey, the Learning Styles Inventory, and the New York City School Survey, as well as a variety of external advisors with content-specific expertise. For instance, our work with the research staff at the Stupski Foundation in 2011 informed the development of our supplemental Student Motivation topic, with questions drawn or adapted from several validated inventories of student motivation, ownership, and engagement developed by researchers at Stanford University, the University of Pennsylvania, and other institutions. In summer 2013, we further refined supplemental questions by examining survey data we had collected from these question modules using quantitative analysis and by engaging with clients about the utility of individual questions.

To date, additional survey topics for Family and Staff Surveys include Distance Learning, Diversity, Equity & Inclusion (DEI).

To ensure questions in our Additional Topics are sufficiently thematically related, we measure the internal consistency of our additional topic questions using a test of reliability known as Cronbach's alpha. More about Cronbach's alpha as it applies to YouthTruth's core survey questions and themes is located in the Survey Constructs, Validity, and Reliability section of this report.

We also assist school and district leaders in developing high-quality, customized survey questions to address other specific topics of interest.

## SURVEY ADMINISTRATION

YouthTruth uses a survey administration process that places the utmost emphasis on data accuracy and ease of administration. Because critical school improvement and professional development decisions are made based on YouthTruth survey data, survey validity is essential.

As complementary surveys, YouthTruth's Family Survey and Staff Survey are administered alongside the YouthTruth Student Survey so that feedback from multiple stakeholder groups is collected during the same time frame under similar conditions. Schools and districts may choose to administer the Family Survey, the Staff Survey, or both alongside the Student Survey.

The Family Survey is designed to be taken by one parent or guardian of each student at a given school. The Staff Survey is designed to be taken by all staff members except principals at a given school. Staff are asked to indicate if they are part of "Support Staff" or "Instructional Staff" at the beginning of the survey. There is slight variation in the survey questions based on staff role type.

We offer standard four-week survey windows each month throughout the academic year, in which YouthTruth partners may participate. YouthTruth partners also have the option of creating their own custom survey window. Partners monitor their response progress – how many family members or staff members have completed the survey – throughout the survey window through a dashboard that updates survey response counts daily. Both the Family Survey and Staff Survey are offered in English and Spanish, where the respondent can toggle between languages. The Family Survey is also available in Chinese, French, Korean, Portuguese, Russian, and Vietnamese. In addition, surveys can be translated and programmed in other languages as a custom element of a client's survey upon request.

Family Surveys and Staff Surveys are taken online through a client-specific survey link. Family Surveys are protected by a CAPTCHA test to protect against non-human test-takers.<sup>10</sup>

Family Surveys and Staff Surveys can be administered online or in-person. Schools that opt for online administration typically disseminate the survey link and login code (if applicable) via email and allow respondents to complete the survey at their convenience. Schools that opt for an in-person administration may set up stations with instructions and appropriate technology to complete the survey while on campus. For example, staff members may take the survey during a staff meeting, and family members may take the survey during a school event such as teacher conferences.

### Post-Survey Data Processing and Quality Control

When survey administration is complete, YouthTruth runs the collected survey data through a rigorous and standardized cleaning, checking, and aggregation process. Newly collected survey data is cleaned and aggregated in our data management system and then folded into the larger comparative dataset.<sup>11</sup> A survey response is defined as the respondent having progressed through at least 25 percent of the survey questions. All questions are optional and do not require a response.

Additionally, we conduct statistical analysis on Likert survey questions with 10 or more responses. We treat the Likert data as continuous and run an independent t-test at a 90% confidence level ( $p = 0.1$ ) to test for differences between average scores from current survey responses to responses from the previous survey administration. Further, we conduct effect size testing to understand the degree to which the difference in relationship exists. Only significant differences with a Cohen's  $d$  effect size greater than  $|0.15|$  are retained, ensuring that mean differences have at least "small" effects.

## PARTICIPATING SCHOOLS

As a national nonprofit, YouthTruth operates with grant support and fee-for-service revenue. As a result, we do not administer surveys among a random or fully nationally representative sample of schools or students and, therefore, the comparative data should not be interpreted as representative of all U.S. schools, staff members, or family members. Nonetheless, the comparative data include a diverse representation of schools and stakeholders. Table 1 describes a range of school-level sample statistics from the Family Survey sample alongside a comparison of these indicators across the U.S. population of public schools. Table 2 describes a range of school-level sample statistics from the Staff Survey sample alongside a comparison of these indicators across the U.S. population of public schools.

YouthTruth's comparative dataset includes only the most recent survey data from all school's YouthTruth has worked with to ensure that all schools are equally represented. This means that schools that repeat the survey over time are still only represented once in the comparative dataset. To ensure the comparative dataset contains only the most relevant data, survey results in the comparison group are limited to data collected within the last ten years.

Compared to the U.S. population of schools, the Family Survey and Staff Survey samples have a larger proportion of suburban schools and a smaller proportion of large and small city schools.<sup>12</sup> In addition, both the Family Survey and Staff Survey have a larger proportion of small and

medium-size schools and a smaller proportion of large-size schools. As with the Student Survey sample, both Family and Staff survey samples include a larger percentage of high poverty schools (defined by the National Center for Education Statistics as a school in which at least 70 percent of students qualify for free or reduced-price lunch). A larger proportion of YouthTruth schools subscribe to non-traditional models, such as charter or vocational models; A comparable proportion of YouthTruth schools are early college high schools. Family and Staff Survey samples represent smaller proportions of alternative and virtual schools than national samples. Though national sample information is not readily available, a portion of YouthTruth schools also have curricula focused on science, technology, engineering, and math (STEM); or project-based learning.

**Table 1. Family Survey School-Level Sample Statistics** <sup>13, 14</sup>

		% of U.S. schools	% of sample	n*
<b>Geography</b>	Large city	28%	11%	124
	Small city	31%	19%	209
	Suburban	7%	38%	430
	Rural	15%	17%	191
<b>School Size</b>	Small	16%	20%	224
	Medium	60%	68%	763
	Large	23%	12%	130
<b>School Type</b>	High Poverty	22%	28%	308
	Early College	<1%	<1%	3
	STEM	n/a	4%	44
	Project-Based Learning	n/a	7%	81
	Charter	5%	12%	131
	Alternative	6%	3%	28
	Virtual	7%	2%	18

**Table 2. Staff Survey School-Level Sample Statistics**

		% of U.S. schools	% of sample	n*
<b>Geography</b>	Large city	28%	10%	117
	Small city	31%	18%	207
	Suburban	7%	41%	484
	Rural	15%	16%	193
<b>School Size</b>	Small	16%	18%	212
	Medium	60%	71%	829
	Large	23%	11%	134
<b>School Type</b>	High Poverty	22%	27%	313
	Early College	<1%	<1%	2
	STEM	n/a	3%	39
	Project-Based Learning	n/a	8%	90
	Charter	5%	10%	115
	Alternative	6%	2%	29
	Virtual	7%	2%	19

Factor analysis is a data reduction technique for examining the underlying structure of a dataset to understand how variables relate to one another.<sup>15</sup> We regularly perform factor analysis on respondent data to: (1) better understand the structure of these data, (2) organize our survey instruments, analysis, and reporting in a way that is analytically rigorous, and (3) group survey questions in a way that helps partners construct meaning from the data.

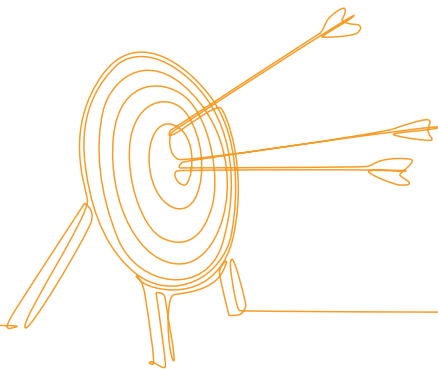
The factors identified through factor analysis represent a way to understand summary-level data about school experiences that would be difficult to assess by asking stakeholders about the summary themes directly. For example, it would not be advisable to ask respondents to rate a school's overall culture. However, by capturing stakeholder perceptions of the core elements of culture – through specific questions about concepts family or staff members are in a position to observe – we can accurately aggregate these results into a measure summarizing school culture.

Six factors emerged in the factor analysis process for the Family Survey. These include Engagement, Relationships, Culture, Communication & Feedback, Resources, and School Safety. Five factors were identified in the Staff Survey, including: Engagement, Relationships, Culture, Professional Development & Support, and School Safety. Appendix Tables 1 and 2 list the questions included within each factor in each survey. Appendix Table 3 describes the reliability of factors, and Appendix Tables 4 and 5 describe each question's correlation to the overall factor, known as the factor coefficient.

The following definitions summarize the concepts described by the questions contained in each factor.

Table 3. Family Survey Factors

Engagement	Describes the degree to which students perceive themselves as engaged with their school and their education.
Relationships	Describes the degree to which families experience positive relationships in their school based on respect, care, and approachability.
Culture	Describes the degree to which families believe their school fosters shared goals, respect, fairness, and diversity.
Communication and Feedback	Describes the degree to which there are open and effective lines of communication between families and schools.
Resources	Describes the degree to which families believe that their school deploys the necessary resources to support students.
School Safety	Describes the degree to which families believe that their school is a safe place for students.





**Table 4. Staff Survey Factors**

<b>Engagement</b>	Describes the degree to which staff feel engaged in their work and empowered to influence their schools.
<b>Relationships</b>	Describes the degree to which staff experience positive relationships in their school based on respect, care and approachability.
<b>Culture</b>	Describes the degree to which staff believe that their school fosters a culture of shared vision, respect, and effective communication.
<b>Professional Development and Support</b>	Describes the degree to which staff receive meaningful feedback, have opportunities to grow professionally and feel supported in their work.
<b>School Safety</b>	Describes the degree to which staff feel the school is a safe learning environment.

### **Discriminant Validity**

A central aim of the survey development process was to construct a series of measures aimed at capturing distinct aspects of school experience for both families and staff members. Evidence for evaluating the success of the aim is commonly referred to as discriminant validity. For both the Family Survey and the Staff Survey, we hypothesized that the factors of interest would not be closely related. Appendix Tables 6 and 7 display the correlations among the factors in the survey instruments. With the correlations ranging between 0.57 and 0.88 in the Family Survey and 0.60 and 0.81 in the Staff Survey, these results suggests that there is acceptable discriminant evidence for all the specified factors.

### **Reliability Testing**

In addition to factor analysis, we measure the internal consistency of both survey instruments' factors using a test of reliability known as Cronbach's alpha. Alpha is expressed as a number between 0 and 1, with a higher alpha indicating that the set of items in a factor are measuring the same construct.<sup>16</sup> Cronbach's alpha is a statistic used widely throughout education research to understand if test questions or survey questions intended to measure a given construct are indeed measuring that construct.

We use this measure to confirm that the questions within each factor are adequately related to the underlying factor. Appendix Table 3 displays the alphas for each factor across both survey instruments. With Cronbach's alphas ranging between 0.85 and 0.93 in the Family Survey and 0.77 and 0.93 in the Staff Survey, these results indicate that the questions grouped within each factor are highly correlated with the factor and truly measure the constructs we intend to measure with them.

## **REPORTING AND COMPARATIVE DATA**

### **Overall Sample, Comparison Groups, and Subgroup Reporting**

One of the primary values of using the YouthTruth surveys is that our reports present feedback within a comprehensive comparative context, including comparisons to the overall YouthTruth sample, a school's district, custom comparison groups, and a variety of family or staff subgroups. These comparative data allow clients to better understand the relative position of their ratings both within and beyond their school and district context. YouthTruth's comparative dataset is updated annually and contains the most recent decade's worth of data.

#### **National Comparison**

Although we do not claim to have a nationally representative sample of schools, we do have a robust dataset representing the experiences and perceptions of family members and staff from a wide range of environments, geographies, and school contexts. This comparative context informs participants' interpretation of their results, aiding educators and administrators to make improvements that are based on sound data. Within reports, results are displayed along a percentile scale so that clients can compare their own ratings to those of other participating schools.

#### **District and School Type Comparisons**

In an effort to make comparisons more contextually meaningful, we provide clients with the opportunity to compare their data to that of smaller subsets of participants with similar characteristics. For example, because most schools participate in the YouthTruth surveys alongside other schools within their local school district or network, most schools can compare their family and staff feedback to that of families and staff from other schools within their district.

We also offer a standard set of comparison groups that allow all partners to view the range of results received by subsets of schools meeting certain criteria related to poverty, school enrollment size, school type (STEM, Early College, etc.), and geography. These standard cohorts are listed in Table 5.<sup>17</sup>

**Table 5. Standard Cohorts**

<b>Alternative schools</b>	Schools that (1) address needs of students that typically cannot be met in a regular school, (2) provide nontraditional education, (3) serve as adjuncts to regular school, or (4) fall outside the categories of regular, special education, or vocational education.
<b>Charter schools</b>	Publicly funded, independently managed schools established under the terms of a charter with a local or national authority.
<b>COVID-19 schools</b>	Schools that fielded surveys in the time of COVID-19 (after March 2020).
<b>High poverty schools</b>	Greater than or equal to 70% of a district or school's students receiving free or reduced-price lunch.
<b>International schools</b>	Schools that are not administered by governmental entities and are funded privately.
<b>Large city schools</b>	Schools located in an urbanized area and in a principal city with a population greater than or equal to 250,000.
<b>Large size schools</b>	For elementary schools: greater than or equal to 600 students; for middle schools: greater than or equal to 800 students; for high schools: greater than or equal to 1,200 students.
<b>PBL schools</b>	Schools utilizing project-based-learning models as part of curriculum.
<b>Rural schools</b>	Schools not located in an urbanized area.
<b>Small city schools</b>	Schools located in an urbanized area and in a principal city with a population of less than 250,000.
<b>Small size schools</b>	For elementary schools: Less than or equal to 150 students. For middle schools: Less than or equal to 200 students. For high schools: Less than or equal to 300 students.
<b>STEM schools</b>	Schools utilizing a curriculum focusing primarily on science, technology, engineering, and math.
<b>Suburban schools</b>	Schools located in an urbanized area, but outside a principal city.
<b>Virtual schools</b>	Schools that offer most or all of their courses online.
<b>2020-21 Distance learning schools</b>	Schools that fielded surveys in the 20-21 school year while operating under a distance learning model.
<b>2020-21 hybrid learning schools</b>	Schools that fielded surveys in the 20-21 school year while operating under a hybrid learning model (with students engaged in both distance learning and in-person learning).
<b>2020-21 in-person learning schools</b>	Schools that fielded surveys in the 20-21 school year while operating under an in-person learning model.

Additionally, if enough schools and districts have surveyed with YouthTruth from a given state, YouthTruth will automatically provide a cohort that includes all schools located in that state. The threshold for a state cohort is survey data from ten unique schools across five unique districts. Other custom cohorts are available upon request.

#### Demographic Questions and Student Subgroup Analysis

Finally, all YouthTruth surveys ask students a variety of demographic questions that allow for subgroup analyses. Secondary students can report the following information about themselves: grade level, gender, race/ethnicity, person of color identity, English language learner status, special education status, and average academic grades. Elementary school students receive only three demographic questions: grade level, gender, and race/ethnicity. In response to 2020 emergency distance learning, YouthTruth added a demographic question allowing both elementary and secondary students to identify whether they were primarily learning in a virtual, in-person, or hybrid environment. Students are not required to answer any questions they do not wish to answer.

Youthtruth offers additional demographic questions that clients can opt into for secondary student surveys only. These optional questions are: receipt of free or reduced-price lunch, transgender identity, and a pair of demographic questions regarding sexual orientation and LGBTQ+ status.

These demographic questions enable clients to view comparisons of differences in student perceptions across different student subgroups in their reports. Additionally, starting in the 2021-22 school year, all Student Survey reports contain a cross-section subgroup combining student grade levels and gender identities for further disaggregation of survey results. Subgroups containing fewer than five respondents are suppressed in reports to protect student confidentiality.

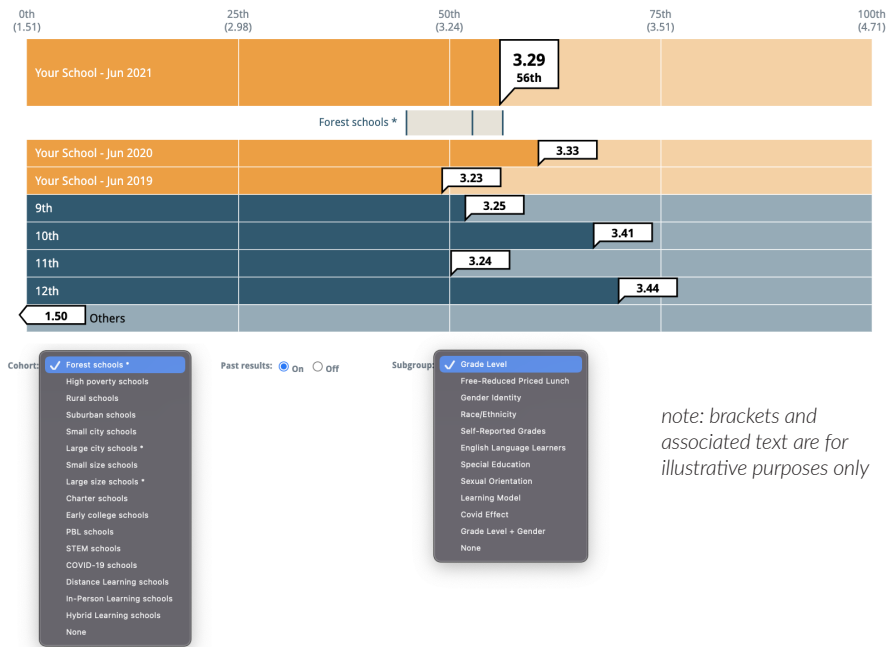
Custom Comparisons and Subgroups

Custom comparison groups and custom subgroup analysis can also be requested to facilitate clients' understanding of the student experience across different school types, programs, or student characteristics.

Report Products

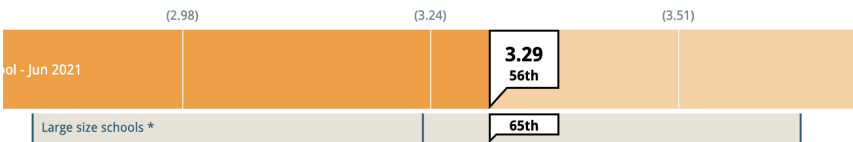
YouthTruth reports are delivered to clients through an interactive, online reporting system, which is password-protected and uses bank-grade security and the option to enable two-factor authentication for all accounts. Reports are designed for each audience: district or network leaders, school leaders, and other stakeholders (with sensitive information redacted). Regional or state “roll-up” reports that combine data from across districts can also be produced.

Figure 1. Sample YouthTruth Chart



**School Rating and National Comparison:** The orange bar at the top of the chart sets this school's rating in a comparative context: compared to all schools of the same level (elementary, middle, high) that have participated in YouthTruth, this school's average rating of 3.42 places it in the 51st percentile – that is, the school received an average rating higher than that of 51 percent of other participating schools. At the top of the chart, the numerical values in parentheses beneath quartile labels indicate the average respondent rating associated with each quartile. In this sample chart, for example, the 25th percentile is associated with an average family rating of 3.18.

**Cohort Comparisons:** The beige bar below the top bar provides a second level of comparison. For most clients, this bar will enable a comparison between a school and the district overall, assuming that other schools from the district are also participating. The tick in the beige bar represents the “typical” or median school in that cohort, while the left and right-most ends of the line represent the lowest and highest-rated schools in the cohort respectively. The user can also toggle the other comparison groups identified in the previous section using the “Cohort” drop-down menu. The asterisk next to cohort names in the drop-down menu, indicates that school's membership in the cohort. For clients comparing their data to data from cohorts that they are also members of, their school's percentile within the cohort is displayed when the user hovers over the beige bar. For example, this sample school is a member of the large city schools cohort, and their current data is in the 28th percentile when compared to other large city schools.



**Trend Data:** The second orange bar (in this example labelled “Your School – Jun 2020” and “Your School – Jun 2019”) allows clients to compare their current average rating to the average rating from previous rounds of surveying (as applicable).

**Subgroup Analysis:** The remainder of the chart enables the user to make further comparisons with their data alone. The blue section at the bottom of the chart contains a range of subgroup data described in the previous section, which the user may change using the drop-down menus. Figure 1 displays subgroups from a Family Survey report.

**District reports:** Districts with more than one school at a given level will receive a District Report to help give an overview of all the schools' survey results. The calculations in these reports are similar to school reports but include every response from each school in the district. The average rating in a District Report is the mean of all respondents' responses in the district at that level. Individual schools show up as subgroups. Importantly, these calculations are not the same as the calculations for district cohorts in school reports which, like all other cohorts, display the "typical" or median school in the district.

**Other Features:** The online reports contain numerous other features, including a key ratings chart, executive summary, narratives of results related to each summary measure, interactive charts for each summary measure and each survey question, stakeholders' perceptions of their school's strengths and areas for improvement, and a file containing indexed stakeholders' qualitative comments. Through the Online Reporting System (ORS), clients can create PowerPoint presentations based on their reports using an embedded presentations feature. The report can be easily downloaded as a PDF. Clients are also able to share current percent positive results for individual questions directly to Twitter (or anywhere else with the copy function) using our integrated Data Bites feature.

GENERAL RESULTS: YOUTHTRUTH AGGREGATE ANALYSIS AND DESCRIPTIVE STATISTICS

This section describes respondent sample statistics and general findings for the high school, middle school, and elementary school Family Survey and Staff Survey. The Family Survey data is based on respondents from over 100,000 family members at over 1,000 schools. Staff Survey data is from over 45,500 staff members at over 1,000 schools.

Sample Statistics

Table 6 provides respondent sample statistics for the family members who participated in a Family Survey and who are included in YouthTruth's comparative dataset. Table 7 provides the same information for the Staff Survey.

Table 6. Family Survey Respondent-Level Sample Statistics		High School Sample	Middle School Sample	Elementary School Sample
n		330,381	207,508	176,242
Avg. Response Rate		74%	88%	90%
Gender	Girl/Woman	75%	76%	78%
	Boy/Man	27%	16%	15%
	Identifies in another way	1%	1%	1%
	Prefers not to say	8%	7%	6%
Race/ethnicity	American Indian, Alaska Native, or Indigenous	1%	1%	1%
	Asian or Asian American	5%	7%	8%
	Black or African-American	4%	5%	6%
	Hispanic or Latina/o/x	18%	19%	21%
	Middle Eastern or North African	<1%	<1%	<1%
	Multiracial and/or Multi-ethnic	2%	2%	3%
	Native Hawaiian or Pacific Islander	1%	1%	1%
	White	53%	50%	47%
	Other race/ethnicity	2%	2%	2%
	Prefers not to say	14%	13%	12%

**Table 7. Staff Survey Respondent-Level Sample Statistics**

		High School Sample	Middle School Sample	Elementary School Sample
n		15,559	9,952	21,856
Avg. Response Rate		52%	58%	76%
Gender	Girl/Woman	28%	21%	7%
	Boy/Man	1%	<1%	<1%
	Identifies in another way	19%	21%	16%
	Prefers not to say	<1%	<1%	<1%
Race/ethnicity	American Indian, Alaska Native, or Indigenous	<1%	<1%	<1%
	Asian or Asian American	2%	2%	2%
	Black or African-American	3%	5%	4%
	Hispanic or Latina/o/x	8%	8%	7%
	Middle Eastern or North African	<1%	<1%	<1%
	Multiracial and/or Multi-ethnic	2%	3%	2%
	Native Hawaiian or Pacific Islander	<1%	<1%	<1%
	White	59%	58%	59%
	Other race/ethnicity	1%	1%	1%
	Prefers not to say	23%	24%	22%

**Table 8. Elementary School Family Survey: Respondent and School Ratings**

	Proportion of Positive Ratings <sup>18</sup>	Average Rating (Standard Deviation)		n	
		Family Members	Schools	Family Members	Schools
Engagement	49%	3.41 (0.84)	3.46 (0.21)	164,566	536
Academic Challenge	61%	3.71 (0.72)	3.74 (0.21)	170,608	550
Relationships	47%	3.48 (0.87)	3.53 (0.26)	169,325	550
Belonging & Peer Collaboration	48%	3.41 (0.74)	3.42 (0.20)	163,897	536
Culture	35%	3.30 (0.80)	3.35 (0.31)	171,337	550



**Table 9. Elementary School Family Survey: Average Respondent Ratings by Subgroup**

n = 4,319

		Culture	School Safety	Engagement	Relationships	Communication and Feedback	Resources
Gender	Girl/Woman	4.10	3.84	3.71	4.29	3.95	3.94
	Boy/Man	4.10	3.94	3.72	4.30	3.98	3.90
	Identifies in another way†	3.25	3.14	2.73	3.54	3.28	3.20
	Prefers not to say	3.47	3.30	3.06	3.74	3.37	3.31
Race/ethnicity	American Indian, Alaska Native, or Indigenous	3.97	3.69	3.53	4.21	3.94	3.83
	Asian or Asian American	4.24	4.10	3.93	4.38	4.10	3.99
	Black or African-American	4.06	3.89	3.79	4.21	4.07	4.02
	Hispanic or Latina/o/x	4.10	3.89	3.82	4.26	4.10	4.01
	Middle Eastern or North African	4.13	3.80	3.64	4.26	3.71	3.81
	Multiracial	4.01	3.74	3.65	4.25	3.89	3.86
	Native Hawaiian or Pacific Islander	4.16	3.97	3.87	4.39	4.20	4.11
	White	4.13	3.84	3.67	4.33	3.90	3.92
	Other race/ethnicity	3.81	3.67	3.43	4.06	3.74	3.67
	Prefers not to say	3.62	3.44	3.21	3.88	3.51	3.46

**Table 10. Middle School Family Survey: Respondent and School Ratings**

	Proportion of Positive Ratings	Average Rating (Standard Deviation)		n	
		Family Members	Schools	Family Members	Schools
Culture	64%	3.75 (0.84)	3.73 (0.35)	3.73	248
School Safety	49%	3.50 (1.02)	3.50 (0.42)	3.73	248
Engagement	45%	3.33 (0.94)	3.37 (0.38)	3.73	248
Relationships	74%	3.93 (0.79)	3.93 (0.30)	3.73	248
Communication and Feedback	55%	3.46 (1.08)	3.51 (0.39)	3.73	248
Resources	59%	3.66 (0.89)	3.64 (0.36)	3.73	248



**Table 11. Middle School Family Survey: Average Respondent Ratings by Subgroup**

n = 2,365

		Culture	School Safety	Engagement	Relationships	Communication and Feedback	Resources
Gender	Girl/Woman	3.80	3.52	3.36	3.97	3.48	3.71
	Boy/Man	3.83	3.68	3.42	4.00	3.62	3.70
	Identifies in another way†	2.91	2.93	2.61	3.24	2.90	3.01
	Prefers not to say	3.20	3.01	2.80	3.46	2.96	3.16
Race/ethnicity	American Indian, Alaska Native, or Indigenous	3.61	3.36	3.16	3.78	3.43	3.51
	Asian or Asian American	4.04	3.90	3.64	4.09	3.75	3.83
	Black or African-American	3.78	3.56	3.53	3.93	3.71	3.84
	Hispanic or Latina/o/x	3.89	3.70	3.66	4.02	3.80	3.88
	Middle Eastern or North African	3.77	3.65	3.22	3.94	3.40	3.64
	Multiracial	3.59	3.26	3.16	3.83	3.36	3.54
	Native Hawaiian or Pacific Islander	3.86	3.64	3.48	3.98	3.66	3.76
	White	3.79	3.48	3.27	4.00	3.40	3.67
	Other race/ethnicity	3.39	3.18	2.99	3.65	3.19	3.34
	Prefers not to say	3.33	3.15	2.91	3.55	3.06	3.25

**Table 12. High School Family Survey: Respondent and School Ratings**

	Proportion of Positive Ratings	Average Rating (Standard Deviation)		n	
		Family Members	Schools	Family Members	Schools
Culture	59%	3.66 (0.83)	3.76 (0.39)	25,489	240
School Safety	50%	3.54 (0.97)	3.64 (0.42)	26,308	240
Engagement	42%	3.26 (0.92)	3.36 (0.41)	25,927	240
Relationships	67%	3.81 (0.80)	3.91 (0.35)	25,923	240
Communication and Feedback	48%	3.30 (1.06)	3.46 (0.43)	26,208	240
Resources	57%	3.61 (0.89)	3.70 (0.41)	26,094	240

**Table 13. High School Family Survey: Average Respondent Ratings by Subgroup**

n = 3,114

		Culture	School Safety	Engagement	Relationships	Communication and Feedback	Resources
Gender	Girl/Woman	3.72	3.57	3.32	3.86	3.33	3.67
	Boy/Man	3.70	3.67	3.31	3.85	3.42	3.63
	Identifies in another way†	2.88	2.97	2.59	3.21	2.84	3.07
	Prefers not to say	3.06	3.04	2.71	3.30	2.83	3.10
Race/ethnicity	American Indian, Alaska Native, or Indigenous	3.46	3.20	3.10	3.60	3.23	3.43
	Asian or Asian American	3.93	3.87	3.56	3.96	3.61	3.83
	Black or African-American	3.79	3.63	3.56	3.95	3.63	3.86
	Hispanic or Latina/o/x	3.80	3.68	3.58	3.89	3.65	3.83
	Middle Eastern or North African	3.78	3.54	3.36	3.95	3.45	3.69
	Multiracial	3.62	3.50	3.14	3.76	3.21	3.56
	Native Hawaiian or Pacific Islander	3.70	3.66	3.34	3.73	3.51	3.70
	White	3.72	3.57	3.25	3.87	3.25	3.63
	Other race/ethnicity	3.29	3.20	2.89	3.50	3.04	3.29
	Prefers not to say	3.33	3.17	2.83	3.42	2.92	3.21

**Table 14. Elementary School Staff Survey: Respondent and School Ratings**

	Proportion of Positive Ratings	Average Rating (Standard Deviation)		n	
		Family Members	Schools	Family Members	Schools
Culture	68%	3.81 (0.78)	589	18,533	589
School Safety	77%	3.95 (0.77)	589	14,615	456
Engagement	80%	4.05 (0.70)	589	18,784	589
Relationships	87%	4.12 (0.58)	589	18,415	589
Professional Development and Support	66%	3.73 (0.72)	589	18,649	589





**Table 15. Elementary School Staff Survey: Average Respondent Ratings by Subgroup**

n = 2,451

		Culture	School Safety	Engagement	Relationships	Professional Development and Support
Gender	Girl/Woman	3.88	3.99	4.12	4.17	3.78
	Boy/Man	4.01	4.11	4.20	4.22	3.87
	Identifies in another way†	3.43	3.55	3.72	3.89	3.45
	Prefers not to say	3.41	3.70	3.71	3.86	3.45
Race/ethnicity	American Indian, Alaska Native, or Indigenous	3.87	4.01	4.18	4.20	3.84
	Asian or Asian American	4.12	4.18	4.34	4.32	4.02
	Black or African-American	3.89	4.02	4.11	4.07	3.95
	Hispanic or Latina/o/x	3.95	4.07	4.19	4.21	3.91
	Middle Eastern or North African	4.10	4.09	4.24	4.26	4.05
	Multiracial	3.93	3.89	4.16	4.17	3.86
	Native Hawaiian or Pacific Islander	3.80	4.03	3.98	4.13	3.59
	White	3.89	3.99	4.12	4.18	3.75
	Other race/ethnicity	3.79	3.87	4.01	4.08	3.69
	Prefers not to say	3.49	3.74	3.77	3.90	3.51

**Table 16. Middle School Staff Survey: Respondent and School Ratings**

	Proportion of Positive Ratings	Average Rating (Standard Deviation)		n	
		Staff Members	Schools	Staff Members	Schools
Culture	56%	3.57 (0.82)	3.81 (0.42)	8,444	241
School Safety	59%	3.59 (0.86)	3.94 (0.37)	6,908	190
Engagement	73%	3.92 (0.75)	4.07 (0.28)	8,547	241
Relationships	80%	3.94 (0.76)	4.12 (0.27)	8,396	241
Professional Development and Support	58%	3.59 (0.76)	3.72 (0.31)	8,491	241

**Table 17. Middle School Staff Survey: Average Respondent Ratings by Subgroup**  
n = 1,374

		Culture	School Safety	Engagement	Relationships	Professional Development and Support
Gender	Girl/Woman	3.66	3.61	4.01	4.00	3.65
	Boy/Man	3.74	3.78	4.03	4.05	3.70
	Identifies in another way†	3.30	3.46	3.61	3.60	3.33
	Prefers not to say	3.16	3.30	3.54	3.67	3.30
Race/ethnicity	American Indian, Alaska Native, or Indigenous	3.19	3.15	3.74	3.71	3.55
	Asian or Asian American	3.93	3.78	4.23	4.15	3.89
	Black or African-American	3.82	3.83	4.02	4.01	3.89
	Hispanic or Latina/o/x	3.78	3.77	4.13	4.07	3.80
	Middle Eastern or North African	3.48	3.42	4.11	3.70	3.36
	Multiracial	3.71	3.77	4.11	4.02	3.77
	Native Hawaiian or Pacific Islander	3.56	3.27	4.01	3.93	3.66
	White	3.64	3.62	3.99	4.00	3.61
	Other race/ethnicity	3.70	3.66	4.04	3.97	3.66
	Prefers not to say	3.24	3.37	3.62	3.71	3.37

Table 18. High School Staff Survey: Respondent and School Ratings	Proportion of Positive Ratings	Average Rating (Standard Deviation)		n	
		Staff Members	Schools	Staff Members	Schools
Culture	50%	3.46 (0.82)	3.56 (0.45)	12,808	256
School Safety	61%	3.62 (0.82)	3.76 (0.45)	11,058	213
Engagement	70%	3.86 (0.74)	3.96 (0.32)	13,003	256
Relationships	78%	3.89 (0.58)	3.98 (0.29)	12,734	256
Development and Support	53%	3.49 (0.76)	3.56 (0.33)	12,917	256

**Table 19. High School Staff  
Survey: Average Respondent  
Ratings by Subgroup**  
n = 1,679

		Culture	School Safety	Engagement	Relationships	Professional Development and Support
Gender	Girl/Woman	3.53	3.63	3.93	3.94	3.55
	Boy/Man	3.61	3.80	3.97	3.99	3.58
	Identifies in another way†	3.06	3.38	3.58	3.63	3.29
	Prefers not to say	3.05	3.35	3.52	3.64	3.22
Race/ ethnicity	American Indian, Alaska Native, or Indigenous	3.46	3.54	3.94	3.91	3.49
	Asian or Asian American	3.69	3.80	4.09	4.07	3.73
	Black or African-American	3.58	3.75	3.97	3.88	3.72
	Hispanic or Latina/o/x	3.69	3.71	4.04	4.01	3.70
	Middle Eastern or North African	3.71	3.68	4.14	4.06	3.53
	Multiracial	3.47	3.64	3.93	3.84	3.54
	Native Hawaiian or Pacific Islander	3.65	3.87	4.18	3.99	3.71
	White	3.54	3.68	3.93	3.96	3.53
	Other race/ethnicity	3.47	3.62	3.83	3.85	3.40
	Prefers not to say	3.13	3.39	3.57	3.68	3.27

APPENDIX

Appendix Table 1. Family Survey Likert-Scale Questions in Factors

Culture

My school's policies are administered fairly and consistently.  
My school runs smoothly.  
I am proud of my school.  
My school creates a friendly environment.  
I believe in my school's mission.  
I feel valued by my school.

School Safety

My child is safe from bullying at school.  
My child's learning environment is safe.

Engagement

I feel empowered to play a meaningful role in decision-making at my school.  
I feel informed about important decisions regarding my school.  
Parent/family members are included in planning school activities.  
I feel engaged with my school.  
I feel represented by parent/family groups (i.e. Parent-Teacher Association) at my school.

Relationships

Families and teachers care about each other.  
Teachers treat families with respect.  
Administrators treat families with respect.  
I feel comfortable approaching the administration about my concerns.  
I feel comfortable approaching teachers about my child's progress.  
Teachers and students care about each other

Communication & Feedback

I receive information about what my child should learn and be able to do.  
I receive regular feedback about my child's progress.  
Teachers clearly communicate expectations for my child's progress.

Resources

My school sets high expectations for students.  
My school has the resources necessary to achieve learning goals.  
My school has the resources necessary to prepare my child for the future.  
My school provides the guidance necessary to help my child succeed.

Appendix Table 2. Staff Survey Likert-Scale Questions in Factors

Culture

My school's policies are administered fairly and consistently.  
My school is managed effectively.  
My school runs smoothly.  
I feel informed about important decisions regarding my school.  
My school creates a positive work environment.  
My school communicates a clear direction for the future.  
Discipline in this school is fair.  
My school sets high expectations for students.  
My school's employees are committed to the success of the school.  
Information about school policies is disseminated to staff clearly.

Safety

Students are safe from bullying at my school.  
In my school, there are clear rules for students against hurting other people.  
I feel safe from harm while at my school.

Engagement

I feel proud of my school.  
I understand my school's goals.  
I feel that my work contributes to the goals of my school.  
I feel that my work at my school is valued.  
I feel empowered to play a meaningful role in decision-making at my school.  
My work gives me a feeling of personal accomplishment.  
My school empowers me to use creativity in how I do my work.  
My job makes good use of my skills and abilities.

Relationships

My school is cooperative and team-oriented.  
Administrators treat staff with respect.  
Staff treat administrators with respect.  
Staff treat families with respect.  
Families treat staff with respect.  
Staff treat each other with respect.  
Students treat staff with respect.  
Staff treat students with respect.  
Staff and students care about each other.  
Staff and administrators care about each other.  
Staff and families care about each other.  
Teachers in my school work together to improve instructional practice.  
I feel comfortable approaching the administration if I need help solving a problem.  
I feel comfortable approaching other staff members if I need help solving a problem.

Professional Development & Support

I have opportunities to learn at work.  
I have opportunities to grow professionally at work.  
I have the necessary resources to do my job well.  
I have access to meaningful professional development.  
My professional development over the last year has been closely connected with my school's priorities.  
I receive regular feedback from my supervisors.  
I receive regular feedback from my colleagues.  
The feedback I receive from my supervisors helps me improve my work.  
The feedback I receive from my colleagues helps me improve my work.

Appendix Table 3. Reliability of Factor Variables

	Factors	Cronbach's Alpha
Family Survey	Culture	0.93
	School Safety	0.85
	Engagement	0.92
	Relationships	0.92
	Communication & Feedback	0.92
	Resources	0.91
Staff Survey	Culture	0.93
	Safety	0.77
	Engagement	0.91
	Relationships	0.92
	Professional Development & Support	0.90



**Appendix Table 4. Overview of Factor Loadings: Family Survey**

Questions	Factor Loading
<b>CULTURE</b>	
My school's policies are administered fairly and consistently.	0.83
My school runs smoothly.	0.75
I am proud of my school.	0.79
My school creates a friendly environment.	0.81
I believe in my school's mission.	0.73
I feel valued by my school.	0.87
<b>ENGAGEMENT</b>	
I feel empowered to play a meaningful role in decision-making at my school.	0.93
I feel informed about important decisions regarding my school.	0.88
Parent/family members are included in planning school activities.	0.88
I feel engaged with my school.	0.94
<b>SCHOOL SAFETY</b>	
My child is safe from bullying at school.	0.88
My child's learning environment is safe.	0.90
<b>RELATIONSHIPS</b>	
Families and teachers care about each other.	0.78
Teachers treat families with respect.	0.75
Administrators treat families with respect.	0.75
I feel comfortable approaching teachers about my child's progress.	0.70
I feel comfortable approaching the administration about my concerns.	0.81
Teachers and students care about each other.	0.76
<b>RESOURCES</b>	
My school sets high expectations for students.	0.75
My school has the resources necessary to achieve learning goals.	0.87
My school has the resources necessary to prepare my child for the future.	0.89
My school provides the guidance necessary to help my child succeed.	0.87
<b>COMMUNICATION &amp; FEEDBACK</b>	
I receive information about what my child should learn and be able to do.	1.00
I receive regular feedback about my child's progress.	1.02
Teachers clearly communicate expectations for my child's progress.	1.05

**Appendix Table 5. Overview of Factor Loadings: Family Survey**

Questions	Factor Loading
<b>CULTURE</b>	
My school's policies are administered fairly and consistently.	0.86
My school is managed effectively.	0.91
My school runs smoothly.	0.85
My school creates a positive work environment.	0.81
Discipline in this school is fair.	0.83
My school's employees are committed to the success of our school.	0.44
My school sets high expectations for students.	0.71
I feel informed about important decisions regarding my school.	0.85
My school communicates a clear direction for the future.	0.82
Information about school policies is disseminated to staff clearly.	0.78
<b>SAFETY</b>	
Students are safe from bullying at my school.	0.72
In my school, there are clear rules for students against hurting other people.	0.77
I feel safe from harm while at my school.	0.69
<b>ENGAGEMENT</b>	
I am proud of my school.	0.69
I understand my school's goals.	0.67
I feel that my work contributes to the goals of my school.	0.60
I feel that my work at my school is valued.	0.82
I feel empowered to play a meaningful role in decision-making at my school.	0.96
My work gives me a feeling of personal accomplishment.	0.63
My school empowers me to use creativity in how I do my work.	0.64
My job makes good use of my skills and abilities.	0.72
<b>RELATIONSHIPS</b>	
My school is cooperative and team-oriented.	0.74
Administrators treat staff with respect.	0.71
Staff treat administrators with respect.	0.53
Staff treat families with respect.	0.46
Families treat staff with respect.	0.48
Staff treat each other with respect.	0.63
Students treat staff with respect.	0.55
Staff treat students with respect.	0.43
Staff and students care about each other.	0.45
Staff and administrators care about each other.	0.72
Staff and families care about each other.	0.56
Teachers in my school work together to improve instructional practice.	0.58
I feel comfortable approaching the administration if I need help solving a problem.	0.71
I feel comfortable approaching other staff members if I need help solving a problem.	0.51
<b>PROFESSIONAL DEVELOPMENT &amp; SUPPORT</b>	
I have opportunities to learn at work.	0.72
I have opportunities to grow professionally at work.	0.81
I have the necessary resources to do my job well.	0.55
I have access to meaningful professional development.	0.82
My professional development over the last year has been closely connected with my school's priorities.	0.74
I receive regular feedback from my supervisors.	0.81
I receive regular feedback from my colleagues.	0.61
The feedback I receive from my supervisors helps me improve my work.	0.79
The feedback I receive from my colleagues helps me improve my work.	0.52

Appendix Table 6. Family Survey Factor Correlation Matrix

Factor	Engagement	College & Career Readiness	Relationships	Culture	Academic Challenge	Belonging & Peer Collaboration
Culture	1.00					
School Safety	0.82	1.00				
Engagement	0.79	0.65	1.00			
Relationships	0.88	0.74	0.73	1.00		
Communication and Feedback	0.80	0.72	0.68	0.75	1.00	
Resources	0.67	0.70	0.57	0.72	0.71	1.00

Appendix Table 7. Staff Survey Factor Correlation Matrix

Factor	Engagement	College & Career Readiness	Relationships	Culture	Academic Challenge	Belonging & Peer Collaboration
Culture	1.00					
School Safety	0.82	1.00				
Engagement	0.79	0.65	1.00			
Relationships	0.88	0.74	0.73	1.00		
Communication and Feedback	0.80	0.72	0.68	0.75	1.00	
Resources	0.67	0.70	0.57	0.72	0.71	1.00



## ENDNOTES

- <sup>1</sup>Twersky, Fay, Phil Buchanan, and Valerie Threlfall. "Listening to those who matter most, the beneficiaries." *Stanford Social Innovation Review* 11, no. 2 (2013): 40-45.
- <sup>2</sup>Epstein, Joyce L. "Effects on student achievement of teachers' practices of parent involvement." Annual Meeting of the American Educational Research Association., 1984. Elsevier Science/JAI Press, 1991.
- <sup>2</sup>Henderson, Anne T., and Karen L. Mapp. "A New Wave of Evidence: The Impact of School, Family, and Community Connections on Student Achievement. Annual Synthesis 2002." National Center for Family and Community Connections with Schools (2002).
- <sup>4</sup>National Parent Teacher Association, "The Heart of the PTA: Parent and Family Involvement, 1993, Chicago.
- <sup>5</sup>Mitchell, Mary M., Catherine P. Bradshaw, and Philip J. Leaf. "Student and teacher perceptions of school climate: A multilevel exploration of patterns of discrepancy." *Journal of School Health* 80.6 (2010): 271-279.
- <sup>6</sup>Education First (2014). "Student Surveys: Measuring Students' Perceptions of Teacher Effectiveness." [http://www.education-first.com/files/Strategies\\_for\\_Success\\_Student\\_Surveys.pdf](http://www.education-first.com/files/Strategies_for_Success_Student_Surveys.pdf)
- <sup>7</sup>Habermas, Jürgen. "The theory of communicative action, Volume 2: Lifeworld and system: A critique of functionalist reason." (1985).
- <sup>8</sup>McCoach, D. Betsy, Robert K. Gable, and John P. Madura. "Instrument development in the affective domain." *Social and Corporate Applications*: Springer (2013).
- <sup>9</sup>American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, & Joint Committee on Standards for Educational and Psychological Testing. (2014). *Standards for educational and psychological testing*. Washington, DC: AERA.
- <sup>10</sup>CAPTCHA, or Completely Automated Public Turing test to tell Computers and Humans Apart, is a response test used to determine if a user is human. In the Family Surveys, the tests asks users to type out letters seen in an image, or to type out words heard in an audio clip.
- <sup>11</sup>The data cleaning process includes a number of tasks, including coding data, summarizing factor variables, and determining which data should be excluded from analysis.
- <sup>12</sup>The geographical designations are drawn from the National Center for Education Statistics locale codes and are as follows (for more information, please see: <https://nces.ed.gov/programs/edge/geographicLocale.aspx>):
- Large city schools: school located in urbanized area and in a principal city with a population of  $\geq 250K$
  - Small city schools: school located in urbanized area and in a principal city with a population of  $< 250K$
  - Suburban schools: school located in an urbanized area, but outside a principal city
  - Rural schools: school located more than 10 miles from an urbanized area.
- <sup>13</sup>Data on the U.S. public school population is drawn from the National Center for Education Statistics "Common Core of Data." U.S. Department of Education (2013). "Common Core of Data, 2010-2011." National Center of Education Statistics: <http://nces.ed.gov/ccd/index.asp>.
- <sup>14</sup>Percentages in the following tables may not add up to 100% because information on some schools' geographic location, for instance, may not be available.
- <sup>15</sup>Specifically, we use principal factor analysis with oblique rotation to analyze variation in the data and identify a set of latent factors. We retained only factors that explained a substantial amount of variation in the data and grouped variables into a factor only if they were highly correlated with the overall factor itself. We retain only factors with Eigen values greater than 0.4 and include variables within factors only if the factor loadings are greater than 0.3. However, the majority of variables within a factor load at 0.5 or higher, with 30% of the factors loading at 0.7 or higher.
- <sup>16</sup>The following rule of thumb applies when interpreting the quality of constructs and their alphas. Excellent:  $>0.9$ ; Good: 0.8-0.9; Acceptable: 0.7-0.8; Questionable: 0.6-0.7; Poor: 0.5-0.6; Unacceptable:  $<0.5$ . Kline, P. (1999). *The handbook of psychological testing* (2nd ed.). London: Routledge.
- <sup>17</sup>Some cohorts are not available for some survey types and levels. The High School Staff Survey does not include the "Early college schools" comparison group.
- <sup>18</sup>The proportion of positive ratings includes the proportion of respondents whose average rating across the related questions was greater than 3.5 out of 5.

\*"n" is shorthand for "sample size" and will be used throughout this report. In this table it refers to the number of schools in each category of the YouthTruth sample.