THE SCHOOL DISTRICT OF
PHILADELPHIA

District-Wide Surveys Technical Report
Updated October 2021

Introduction

The School District of Philadelphia District-Wide Surveys represent a unique opportunity for students, parents/guardians, teachers, and principals in Philadelphia's District and Charter schools to share their perspectives and provide feedback about how they experience and perceive their schools. Our goal is that the feedback from the surveys be rigorous, actionable data that can be used to improve our city's schools.

This report describes the framework that guided survey development, the administration of the surveys, the processes of survey reliability testing and validation, and the construction of school-level scores for reports. With an eye toward the goal of creating an equitable system of schools, survey feedback provides a more complete picture of Philadelphia schools than relying solely on traditional measures of school success. By considering the perspectives of different groups in a school, the data derived from these surveys can help pinpoint what is working well in a school along with areas that need to be improved.

Survey Framework

Building on the extensive research on effective schools and comprehensive school reform, and the work of Bryk and his colleagues at The University of Chicago Consortium on School Research,[1] in 2014 we (along with staff from the University of Pennsylvania) worked collaboratively with school stakeholders to refine and further develop Philadelphia's District-Wide Surveys. Taken together, the five surveys (student, parent/guardian, teacher, support staff, and principal/assistant principal[2]) are designed to measure five key constructs related to school improvement:[3]

1. **Climate** -- Areas affecting the school environment: school mission and vision, respectful relationships, student safety and support, and challenges to student learning.

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[1] Bryk, A. S., Sebring, P. B., Allensworth, E., Luppescu, S., & Easton, J. Q. (2010). *Organizing Schools for Improvement: Lessons from Chicago*. Chicago, IL: The University of Chicago Press.
[2] Assistant principals were included as a respondent group for the first time in 2020-21. They complete the same survey as principals.
[3] These constructs draw on Bryk and colleagues' (2010) work in Chicago, which identified five essential supports for school improvement. We altered the language of the essential supports to make the terms more publicly accessible and reflect the broader set of questions covered by the surveys. The original names of the five essential supports identified by Bryk and his colleagues are school leadership, parent-community ties, professional capacity, student-centered learning climate, and instructional guidance.

2. **Instruction** -- Student engagement and how students, parents/guardians, and teachers feel about the quality of teaching and learning at their school.

3. **Leadership** -- How school leaders communicate and implement their school vision, how they manage their responsibilities, and how they perceive their level of autonomy.

4. **Professional Capacity** -- How school staff work together, what types of professional development teachers receive, and if teachers feel supported in growing and innovating in their classrooms.

5. **Parent/Guardian-Community Ties** -- How schools reach out to and communicate with parents/guardians, what parents/guardians think about these efforts, and how parents/guardians are getting involved with their child's education.

Additionally, each of the five main constructs is comprised of sub-constructs provide additional information in specific areas where leaders and stakeholders might target their attention (see Appendix A for a list of all constructs and subconstructs). For many (but not all) constructs, the surveys ask similar questions of multiple respondent groups (e.g., teachers and students) to allow comparison of different views (Table 1).

Table 1: Constructs and Survey Instrument Alignment

| Survey | Construct | | | | |
	Climate	Instruction	Leadership	Professional Capacity	Parent/Guardian-Community Ties
Parent/Guardian	X	X	X*		X
Student	X	X			
Teacher	X	X	X	X	X
Principal/Assistant Principal#	X	X	X	X	X
Support Staff^	X		X	X	

*Added in 2018-19.
#Assistant principals were included as a respondent group for the first time in 2020-21. They complete the same survey as principals.
^The survey was piloted in 2019-20.

Analyzing the responses from different groups in a school can help identify what is working well along with areas that need to be improved. For example, survey results may show that a school is successful in the area of Instruction, but is experiencing challenges in Parent/Guardian-Community Ties. The surveys also include questions that are not aligned to one of the five research-based constructs but are of interest to stakeholders across our schools and city. These include questions about school lunches, transportation, and District programs.

Survey Development & Administration

Initial Survey Development

In the spring of 2014, the School District of Philadelphia (SDP) Office of Research and Evaluation (ORE) administered pilot surveys to students and parents/guardians across the city. These surveys served as the foundation for the Student and Parent/Guardian District-Wide Surveys. To create the Principal and Teacher District-Wide Surveys, we combined the original SDP survey items with items from other surveys used nationally that had documented reliability and validity. After the initial draft surveys were created, SDP and University of Pennsylvania Graduate School of Education (Penn GSE) researchers and practitioners reviewed them. The next phase of development involved collecting feedback on the draft surveys from Philadelphia stakeholders. These efforts included focus groups and cognitive interviews[4] with students, teachers, school administrators, principals, parents/guardians, and staff from the SDP Office of Family and Community Engagement. Stakeholders who provided feedback were representative of a variety of schools, grades, subjects, and communities. Over the six-month period of survey development, each survey went through over 10 rounds of intensive review and revisions.

In 2019, five years after the initial development of the surveys, we revisited the surveys by inviting stakeholder feedback from students, parents/guardians, teachers, principals, and central office staff about possible additions, subtractions, clarifications, and other revisions. To gather feedback about the surveys, we offered in-person focus group sessions and distributed an online feedback form using SurveyMonkey. ORE reviewed and coded the feedback based on stakeholder and type of feedback (types of feedback included add question, remove question, re-word question, and add clarifying text).

When reviewing stakeholder feedback and possible revisions, we considered many different interests and tensions, including the need to keep the wording of core questions consistent over time, the scope of the survey, gathering overall information about constructs vs. answers to specific survey questions, the applicability of the questions to all stakeholders, the length of the survey, the clarity of the questions, and maintaining the integrity of the constructs and sub-constructs, based on the results of a factor analysis, Cronbach's alpha calculations, and a longitudinal measurement invariance (LMI) analysis.

Support Staff Survey Development

In 2019-20, ORE developed and administered a new survey to non-instructional school-based staff, including counselors, nurses, and classroom aides. The first year of data collection was designed as a pilot year. The Support Staff survey was developed by gathering relevant questions from the District-Wide (DWS) Teacher Survey as well as adding new questions based on input from the Office of Student Support Services and the Office of Academic Supports around specific fields and

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[4] Cognitive interviews are when a respondent talks through each survey question, indicating any confusion or problems with the question.

areas of knowledge that are unique to Support Staff roles. Many of the validated items taken from the DWS Teacher survey are from the Leadership and School Climate constructs. Given SDP's commitment to ensuring that all staff, especially those working in climate-specific roles, are trained in trauma-informed practices, we included a series of questions around knowledge of trauma-informed practices among the Professional Capacity questions. Additionally, based on the variety of roles that School Support Staff fill, we also included questions around role clarity and expectations under the topic area of Leadership.

We conducted a factor analysis and Cronbach's alpha calculations to examine whether the Support Staff survey items were reliable and valid measures of the three constructs mentioned above (School Climate, Leadership, and Professional Capacity). Based on the findings we confirmed the validity of the items being grouped into three of the five constructs: School Climate, Leadership, and Professional Capacity. Additionally, as with the other surveys, the main constructs are comprised of sub-constructs, which can be used for a closer look at specific areas where leaders and stakeholders might target their attention. In the Support Staff survey, each of the three constructs is made of two sub-constructs. School Climate is comprised of Respect and Challenges to Student Learning. Professional Capacity is comprised of Knowledge of Trauma-Informed Practices and Knowledge of Student Supports. Finally, Leadership is comprised of two sub-constructs, Leadership Competencies and Communication of Expectations.

Changes to the 2020-21 Surveys

In 2020, there were two key events that triggered the removal and addition of questions to the DWS: the development of SDP's Equity Coalition and the COVID-19 pandemic that meant schools engaged entirely in digital learning for the majority of the 2020-21 school year, followed by a hybrid model for some students from March 2021 to the end of the school year. See Table 2 for a summary of changes, including the number of questions added and removed.

The Addition of Equity and Inclusion Questions

In the winter of the 2020-21 school year, ORE worked with members of the newly developed Equity Coalition to develop new DWS questions about equity that could help us understand the perspectives and experiences of parents/guardians, students, teachers, principals, and school-based staff. Building on existing validated instruments, the survey team adopted and adapted items from staff and student instruments developed by Panorama Education.[5] In some cases, items were adopted verbatim; in others, the wording was adapted to fit the specific SDP context and/or be appropriate for parent and guardian respondents, as the Panorama surveys were designed for students and school-based staff.

This initial administration (2020-21) was considered a pilot year, meaning the new question data must undergo statistical analyses to ensure that the questions are valid and reliable measures. For each of the surveys, we conducted a factor analysis and Cronbach's alpha calculations to examine

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[5] The Panorama Equity and Inclusion Surveys : https://go.panoramaed.com/thanks/measuring-equity-inclusion?submissionGuid=baac0511-51e1-4196-aabd-9c669cf5dad

whether the Equity items were reliable and valid measures. Since the items were taken from existing instruments with validated constructs and sub-constructs, we first ran Cronbach's alpha calculations that included all the Equity questions for each survey. Then, we ran factor analyses to identify questions that, when removed, could increase the validity of the constructs. Additionally, we used the factor analyses findings to group the items into sub-constructs, which vary by survey (see Appendix B).

Since this was the first year that these new items appeared on the surveys, the results from these survey questions will not be used in the same way as others, at least for the first year.

The Removal of Building-Specific Questions

Due to the COVID-19 pandemic, all students participated in digital learning for the majority of the 2020-21 school year. Students transitioned back to in-person learning in the spring of 2020-21, beginning with Kindergarten and expanding to older grades. However, learning was hybrid (meaning that students attended in-person two days per week and digitally the other three days per week) and attending in-person was optional. Students in grades 10-12 did not have an opportunity to return to in-person learning at all. Because students spent either most of all of the school year learning digitally, , questions were removed that asked specifically about experiences with the physical school buildings (e.g., "I feel safe in the hallways," "My school is clean," "When I eat school lunches, I know what is on the menu before I get to the cafeteria"). A summary of the number of questions added and removed to the District-Wide Surveys in 2020-21 appears in Table 2.

Table 2: Summary of Changes to the 2020-21 District-Wide Surveys

	Student Survey	Parent/Guardian Survey	Teacher Survey	Principal/Assistant Principal Survey
Questions Before Revisions	107	64	158	131
Number of Equity and Inclusion Questions Added	10	9	13	10
Number of Building-Specific Questions Removed	23	11	13	15
Number of Questions After Revisions	94	62	158	123

Administration

Each year, ORE carefully plans the timing and duration of the administration windows for each of the surveys to optimize participant access and response rates. The surveys are primarily administered online via SurveyMonkey. However, schools are also provided with paper copies of

the Parent/Guardian survey. In the 2014-2015 school year, the number of paper copies was equal to approximately 5% of the school's enrollment (i.e., a school with 500 students received 25 paper surveys). Beginning in the 2015-2016 school year, schools could request paper copies up to a maximum of 10% of their school's enrollment. Photocopying or otherwise duplicating these surveys is prohibited. ORE did not offer paper copies in the 2020-21 school year as all students were provided with computing devices (typically Chromebooks) that could be used at home to take the survey.

To accommodate the diverse populations served by SDP, the Parent/Guardian survey is translated into eight languages. All nine languages (including English) are available online. In the 2014-2015 school year, schools with non-English speaking populations were provided with surveys translated into Spanish and Chinese based on the percentage of enrolled students with a home language on file other than English. Since then, ORE asks principals to request paper copies in English, Spanish, and Chinese. The administration windows for each survey are outlined in Table 3. In response to feedback from stakeholders, we extended the window beginning in the 2015-2016 school year.

To ensure the validity of responses, students and parents/guardians are required to enter a unique District Student ID number in order to access the surveys. Charter teachers and principals are provided with secure links to the survey via their email accounts. District teachers and principals access the survey through their employee portal. Efforts to increase response rates include sending email reminders, mailing letters home, scheduling robo-calls, and providing schools with posters and flyers with information about the surveys. Beginning in 2018-19, teachers and parents/guardians that completed the survey could enter into a raffle for a chance to win a gift card.

Table 3: Survey Administration Windows

Year	Student	Parent/ Guardian	Teacher	Principal/ Assistant Principal^	Support Staff#
2014-15	May 4 – June 19, 2015	April 20 – June 19, 2015	May 18 – June 19, 2015	May 18 – June 19, 2015	N/A
2015-16	March 31 – June 27, 2016	March 31 – June 27, 2016	May 3 – May 27, 2016	May 3 – May 27, 2016	N/A
2016-17	April 3 – June 23, 2017	April 3 – June 23, 2017	April 3 – June 5, 2017	April 3 – June 5, 2017	N/A
2017-18	February 12 – June 8, 2018	February 12 – June 8, 2018	March 1 – June 1, 2018	March 1 – June 1, 2018	N/A
2018-19	January 28 – June 7, 2019	January 28 – June 7, 2019	February 25 – June 7, 2019	February 25 – June 7, 2019	N/A
2019-20*	February 3 – June 15, 2020	February 3 – July 15, 2020	February 3 – June 15, 2020	February 3 – June 15, 2020	February 3 – June 15, 2020
2020-21	March 1 – May 28, 2021	March 1 – May 28, 2021	March 1 – May 28, 2021	March 1 – May 28, 2021	March 1 – May 28, 2021

*Due to the COVID-19 pandemic, all students transitioned to digital learning on March 16, 2020. This was in the middle of the survey window. The survey window was extended for all surveys, and respondents who had not already completed the survey were instructed to answer survey questions based on their overall experience for the entire school year.
^Assistant principals were included as a respondent group for the first time in 2020-21. They complete the same survey as principals.
#For the first time in 2019-20, ORE administered a new survey to non-instructional school-based staff, including counselors, nurses, and classroom aides.

Response Rates

Surveys must meet a minimum number of items answered to be counted as a response. The following rules are applied to determine the response rates for each respondent group. Duplicate responses are removed so that each individual has one response.

Student Survey
- For years prior to 2019-20, the denominator for the student response rate is based on enrollment as of May 31. To accommodate the shorter survey window in 2020-21, the response rate is based on enrollment as of May 1, 2021.
- Student responses are attributed to the school they were enrolled in at the time they took the survey (this means if a student changed schools during the survey window, they may count as a response for one school but for enrollment at a different school).

Parent/Guardian Survey
- For years prior to 2019-20, the denominator for the parent/guardian response rate is based on enrollment as of May 31. To accommodate the shorter survey window in 2020-21, the response rate is based on enrollment as of May 1, 2021.
- Beginning in 2019-20, the denominator for the parent/guardian response rate uses the total number of unique primary households at each school. Households may be counted more than once if students associated with that household attend different schools.
- Each parent/guardian is prompted to enter their child's student ID in order to complete the survey. Parent/guardian responses are attributed to the school their student was enrolled in at the time the parent took the survey.

Teacher Survey
District:
- For years prior to 2019-20, the number of teachers for each school is based on the number of active K-12 teachers as of May 31. Teachers on leave as of this date are not included.
- To accommodate the shorter survey window in 2020-21, the response rate is based on employment as of May 1, 2021.
- Teacher responses are attributed to the school the teacher was assigned to at the time they took the survey.

Charter:
- Charter schools provide a list of active K-12 teachers before the survey window opens. This list is used for attributing teachers to schools. Charter schools may reach out during the survey window to provide updates as necessary.

Principal/Assistant Principal Survey
District:
- The response rate is based on the total number of principals and Assistant Principals (APs) per school.
- Principal and AP responses are attributed to the school the principal or AP was assigned to at the time they took the survey.

Charter:
- The Charter office provides a list of principals and assistant principals (APs) before the survey window opens. This list is used for attributing principals and APs to schools. Charter schools may have several administrators (e.g., a principal and a chief executive officer) and ORE asks for the Charter office to identify the roles that are most equivalent to principal and AP for the school. In some cases, this may still result in more than one principal or AP being invited to take the survey for a Charter school.

Support Staff Survey

- For the pilot year of 2019-20, we included District support staff and not Charter support staff. For 2020-21, we added in support staff at contracted District schools.
- Support staff who were on leave during the survey window are not included in the survey.
- The employment snapshot date used to calculate support staff response rates in 2020-21 was May 1, 2021.
- Support staff responses are attributed to the school each respondent was assigned to at the time they took the survey.

Table 4 shows survey response rates for each respondent group for the 2014-2015 through 2020-2021 school years.

Table 4: Response Rate and Number by Respondent Group

Year		Student	Parent/ Guardian	Teacher	Principal/ Assistant Principal%	Support Staff#
2014-15	Rate	33%	7%	53%	64%	N/A
	Number	46,695	13,360	5,423	185	N/A
2015-16	Rate	50%	13%	51%	73%	N/A
	Number	73,187	25,911	5,688	241	N/A
2016-17	Rate	50%	16%	56%	57%	N/A
	Number	72,580	30,968	6,515	184	N/A
2017-18	Rate	54%	17%	54%	60%	N/A
	Number	80,101	33,334	6,652	199	N/A
2018-19	Rate	61%	23%*	56%	56%	N/A
	Number	89,496	35,055	6,663	185	N/A
2019-20^	Rate	32%	16%*	64%	48%	37%
	Number	47,439	25,915	6,986	168	1,311
2020-21	Rate	42%	16%	68%	45%	43%
	Number	62,353	24,313	8,267	242	1,525

Note: Parent & Guardian and Student response percentages are based on student enrollment records as of May 31 (May 1 beginning in 2020-21). Teacher response percentages are based on District teachers with an "active status" on record as of May 31 (May 1 beginning in 2020-21). For charter school teachers, the response percentage is based on the email addresses provided by Charter schools during the survey administration period.

^ In response to the school closures due to the COVID-19 pandemic, the enrollment and employment snapshot date used to calculate teacher response rates in 2019-20 was changed to March 13, 2020. This was the last day that students were in school before the closures.

*Beginning in 2018-19, the number of households is used to calculate the parent/guardian response rate.

%Assistant principals were included as a respondent group for the first time in 2020-21. They complete the same survey as principals.

In 2019-20, ORE developed and administered a new survey to non-instructional school-based staff, including counselors, nurses, and classroom aides.

Data Validation and Reliability Testing

Item Reliability

In order to assess the internal consistency of the survey items within each construct and sub-construct, ORE calculated Cronbach's alphas for each of the five constructs by combining all questions related to that topic. Cronbach's alpha is a common measure of reliability that can be used to evaluate the extent to which a group of items are related (Cronbach, 1951). We originally ran reliability testing in 2014-2015 and updated it again in 2018-2019 and in 2020-21. Because students engaged in digital learning for the majority of the 2020-21 school year, items that were not relevant (e.g., questions that related specifically to school buildings or the commute to school) were temporarily removed from the survey (see Table 2). Therefore, Cronbach's alphas were re-calculated.

All scale reliabilities, with the exception of two, fell within the 0.70 and 0.91 range, which indicates an acceptable internal consistency between items within each topic and subtopic without item redundancy (Nunnally & Bernstein, 1994). The lower alpha level for the Parent/Guardian Community Ties topic on the principal survey may be explained by the limited number of questions included in the topic (usually, the more items a dimension has the higher the reliability). The very low alpha for the parent/guardian Climate construct is due to the temporary removal of several questions that were specific to in-person learning. These questions will be added back to the survey in future years. Because we often look at school-level Climate scores utilizing the perspectives of multiple respondent groups, the low alpha from the parent/guardian survey is less of a concern. Table 5 provides the alphas for the five topics as measured across the five surveys.

Table 5: Cronbach's Alpha for Survey Constructs (Topics), 2020-2021

Constructs	Student	Parent/ Guardian	Teacher	Principal/ Assistant Principal	Support Staff
Climate	.79	.22*	.94	.87	.89
Instruction	.90	.91	.75	.78	--
Leadership	--	.95	.92	.79	.92
Professional Capacity	--	--	.91	.86	.90
Parent/Guardian Community Ties	--	.91	.90	.69	--

*This low alpha is the result of questions being removed from the survey that were building specific and therefore not relevant for the 2020-21 school year, which was digital for most students for the majority of the school year. These questions will appear on future surveys, which should result in an increase in the alpha.

Construct Validity and Factor Analysis

In 2014-2015, 2016-2017, and 2018-2019, we used exploratory factor analysis (EFA) to explore the dimensionality of the topics. EFA is used to explore the possible underlying factor structure (Child, 1990; Thorndike, Cunningham, Thorndike, & Hagen, 1991). In our data validation, we used EFA to explore whether each of the five constructs related to school improvement represented a latent factor. EFA was purposely chosen as the type of analysis to analyze the surveys to provide an unbiased, theory-neutral validity check on our survey constructs and sub-constructs.

An oblique rotation method—"direct oblim"—was used in order to simplify the structure of the factor loadings. In their research, Bryk and colleagues (2010) found that the five essential supports (analogous to our five topics) all related to one another and correlated with student achievement. Consequently, oblique rotation was chosen over other rotation methods as it allows for factors to be correlated (Costello & Osborne, 2005). Following best practice, in our EFA, we specified a minimum loading value of 0.3 (Costello & Osborne, 2005), and used the Kaiser criterion, specifying that all factors must have eigenvalues greater than 1.0 (Ford, MacCallum, & Tait, 1986; Kaiser, 1970).

Overall, the EFAs confirmed the validity of the five constructs and their sub-constructs. In the few cases where the EFAs did not, we refined the survey scales by eliminating the questions that did not align with the other questions in that construct. In this way we were able to ensure we had reliable measures of each topic and subtopic.

Construct Scoring

In 2018-19, we developed a system that provides each school with a score for each of the five constructs with the goal of maximizing the ability to use the data to target areas for school improvement,

Thresholds

To ensure that school-level scores were representative of a school's community, we applied the thresholds shown in Table 6 to the survey to determine if a school had enough survey responses to warrant analysis. If these school-level thresholds are not met, then that school's data is suppressed for that respondent group.

Table 6: Survey Participation Rate Thresholds

Survey	Threshold
Student	25% of students at a school
Parent/Guardian	10% of a school's enrollment
Teacher	25% of teaching staff at a school
Support Staff^	25% of non-teaching staff at a school
Principal/Assistant Principal*	N/A

^See Appendix C for a list of the title codes that are included in the Support Staff respondent category.
*Assistant principals were included as a respondent group for the first time in 2020-21. They complete the same survey as principals.

Scoring Procedure

ORE excludes survey items from scoring that do not have clear polarity (positive or negative) and require more complex interpretations. Items selected for scoring are grouped according to sub-construct and construct. Before calculating the scores, all responses are reverse coded (if necessary) and transformed to be on a 0-10 scale. The steps taken to create the school-level scores are detailed below.

For each respondent category a sub-construct score is calculated by summing the responses to all questions in that sub-construct and then dividing by the total number of items that were answered that comprise the sub-construct, see Box 1. To create construct-level scores, the relevant sub-construct scores are averaged.

School-level scores reflect an average of the scores for each respondent group. For example, a school's overall Climate score is equal to the average of all of the sub-construct Climate scores from the Student, Parent/Guardian, and Teacher surveys. Each sub-construct score carries equal weight. If the response rate thresholds are met, schools receive a school-level score for each of the five constructs related to improvement (Climate, Instruction, Leadership, Professional Capacity, and Parent/Guardian-Community Ties).

Box 1: How do we create District-Wide Survey construct and sub-construct scores?

Calculating construct and sub-construct scores helps us compare responses across different topics. To calculate the sub-construct scores, we first assign each possible response a numeric value, with the most positive response assigned the highest value and the least positive the lowest. Next, we add these values for all of the items in the sub-construct. Finally, the sum is divided by the total count of survey items comprising that sub-construct (excluding those with missing values). The construct score is calculated by averaging all the sub-construct scores.

Take for example, the **External-level Challenges to Student Learning** sub-construct. For each of the five items of this sub-construct, there are four response options (A great challenge, A slight challenge, A moderate challenge, and Not a challenge). Each response corresponds with a number from 0-10, with 0 being the most negative and 10 being the most positive (i.e., A great challenge = 0 and Not a challenge =10). To get the sub-construct score, we add up all the response values (each ranging from 0-10) and then divide by five (total number of items). We repeat this process with each of the sub-constructs, so each sub-constrict has a score from 0-10. See below for an example on calculating the average for the External-level Challenges to Student-learning sub-construct:

	Item Q1	Item Q2	Item Q3	Item Q4	Item Q5
Survey Responses and Values	A great challenge = 0	A moderate challenge = 3.33	Not a challenge = 10	A slight challenge = 6.66	A slight challenge = 6.66

External-level Challenges to Student-learning sub-construct average score:
(0+3.33+10+6.66+6.66)/5 = 5.33

Contact Information

If you have any questions, please contact The Office of Research and Evaluation at
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Appendix A: 2020-21 Survey Constructs and Sub-constructs by Respondent Type

Teacher

Construct	Sub-construct	Number of Items
Climate	Student Centered Learning Climate	13
	Respect	9
	Challenges: Classroom Level	6
	Challenges: School Level	15
	Challenges: External	5*
	Attendance	4
	School Discipline	9
	Overall	**61**
Instruction	**Overall**	**17**
Parent/Guardian Community Ties	**Overall**	7
School Leadership	Expectations and Feedback	6
	Inclusive Leadership	5
	Classroom-level Decision Making	10
	Overall	**21**
Professional Capacity	Innovation	5
	Quality of PD	8
	Quality of PD: Delivery	6
	Quality of PD: Consistency	5
	Peer Collaboration	7
	Overall	**31**

*Building-specific questions were temporarily removed due to digital learning for the majority of the 2020-21 school year.

Parent/Guardian

Construct	Sub-construct	Number of Items
Climate	Bullying	3
	Safety/Building Condition	1*
	Overall	**4**
Instruction	**Overall**	**5**
Parent/Guardian Community Ties	Communication Quality	9
	Parent/Guardian-School Relationship	5
	Parent/Guardian Involvement	2*
	Overall	**16**
School Leadership	**Overall**	**6**
Other	Attendance	**4**
	Community Services	7
	Healthy Food Access	5
	Reading	5
	Technology Access	4

*Building-specific questions were temporarily removed due to digital learning for the majority of the 2020-21 school year.

Student

Construct	Sub-construct	Number of Items
Climate	Bullying	16
	Safety/Building Condition	1*
	Belonging	5
	Overall	22
Instruction	**Overall**	17
Other	Student Beliefs	8
	College and Career Readiness	7
	Food Services	8
	Health and Nutrition	6*
	Technology	3

*Building-specific questions were temporarily removed due to digital learning for the majority of the 2020-21 school year.

Principal

Construct	Sub-construct	Number of Items
Climate	Challenges: School Level	16
	Challenges: External	8
	Challenges: Attendance	4
	Interpersonal Relationships	7
	Overall	**35**
Instruction	Data Use	9
	External Supports	6
	Overall	**15**
Parent/Guardian Community Ties	**Overall**	4
School Leadership	Managerial	8
	Instructional	4
	School-level decision making	9
	Overall	**21**
Professional Capacity	Peer Collaboration	4
	Quality of PD: Delivery	7
	Overall	**11**
Other	District Assistance	5
	Student and Family Interactions	2
	Data Systems	23

*Building-specific questions were temporarily removed due to digital learning for the majority of the 2020-21 school year.

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School Support Staff Survey

Construct	Sub-construct	Number of Items
School Climate	Challenges to Student Learning*	13
	Respect*	8
	Overall	**21**
Leadership	Inclusive Leadership	6
	Communication of Expectations	8
	Overall	**14**
Professional Capacity	Knowledge of Trauma Informed Practices	4
	Knowledge of Student Supports	5
	Overall	**9**

*Building-specific questions were temporarily removed due to digital learning for the majority of the 2020-21 school year.

Appendix B: Results from the Data Validation and Reliability Testing for the Equity and Inclusion Questions

In the winter of the 2020-21 school year, ORE worked with members of the newly developed Equity Coalition to develop new DWS questions about equity that could help us understand the perspectives and experiences of parents/guardians, students, teachers, principals, and school-based staff. Building on existing validated instruments, the survey team adopted and adapted items from staff and student instruments developed by Panorama Education.[6] In some cases, items were adopted verbatim; in others, the wording was adapted to fit the specific SDP context and/or be appropriate for parent and guardian respondents, as the Panorama surveys were designed for students and school-based staff. All of the items were new to the 2020-21 surveys.

Table B1. Cronbach's Alpha for Equity Questions, 2020-21

Survey	Sub Construct*	Number of Items	Cronbach's Alpha
Teacher	Belonging	3	.90
	Educating All Students	5	.79
	Anti-racist Professional Culture	5	.80
	Overall	13	.87
Parent/Guardian	Belonging	4	.91
	Cultural Awareness and Action	5	.86
	Overall	9	.87
Principal/ Assistant Principal	Belonging	3	.87
	Cultural Awareness and Action	7	.79
	Overall^	10	.83
Student	Educating All Students	5	.78
	Cultural Awareness and Action	5	.75
	Overall	10	.83
Support Staff	Cultural Awareness and Action	4	.76
	Belonging	4	.85
	Overall#	8	.84

*The items and the names of the sub-constructs were adopted and adapted from the Panorama and Inclusion Surveys: https://go.panoramaed.com/thanks/measuring-equity-inclusion?submissionGuid=baac0511-51e1-4196-aabd-9c9669cf5dad
^Total number of questions with three items removed per the results of the factor analysis.
#Total number of questions with two items removed per the results of the factor analysis.

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[6] The Panorama Equity and Inclusion Surveys : https://go.panoramaed.com/thanks/measuring-equity-inclusion?submissionGuid=baac0511-51e1-4196-aabd-9c9669cf5dad

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Appendix C: List of Support Staff Title Codes

Title Code	Title Name	Title Group
0486	SCHOOL COUNSELOR, 10 MONTHS	T100
0487	BEHAVIORAL HEALTH COUNSELOR	T100
0502	COMMUNITY RELATION LIAISON,FT	E100
0503	CONFLICT RESOLUTION SPECIALIST	E100
0507	BILINGUAL VOC SUPPORT ASST	E100
0510	INTERP, DEAF/HARD OF HEARING	E100
0536	SCHOOL PSYCHOLOGIST	T103
0541	SCHOOL PSYCHOLOGIST, BILINGUAL	T103
0554	LIFEGUARD	E100
0812	CLASSROOM ASST,SP ED,HEAR IMP	E100
0816	SCHOOL COMMUNITY COORD, FT	E100
0819	CLIMATE SUPPORT SPECIALIST	E100
0825	CAREER & TECHNICAL EDUC ASST	E100
0839	CLASSROOM ASST	E100
0844	LIBRARY INSTR MTRLS ASST,FT	E100
0858	COUNSELING ASST,BILINGUAL	E100
0863	SPECIAL EDUCATION ASSISTANT	E100
0877S	PROG ASSISTANT	S102
0885	SCHOOL IMPROV SUPPORT LIAISON	E100
1111	SECRETARY I	S100
1114	SECRETARY III (GENERAL)	S100
1119	SECRETARY I,II,3 DAYS/WEEK	S100
1133	EXECUTIVE SECRETARY	S100
1243	SCHOOL-BASED TECH MAINT ASST	E100
1712	SCHOOL NURSE	N100
1715	SCHOOL NURSE PRACTITIONER	N100
1817	SCHOOL CLIMATE MANAGER	P106
6005	AGRICULTURAL MECH & STOCK CLK	E100