

# Philly School Experience Survey Technical Report

December 2024



# **Table of Contents**

Introduction	3
History of the Survey Program	3
Survey Framework	4
Changes to PSES Instruments in 2023-24	6
Survey Administration	7
Administration Timeline and Process	7
Integration with Student Well-Being Survey	8
Survey Translation	9
Survey Modalities	9
Parent/Guardian Survey Anonymity	10
Strategies for Increasing Response Rates	10
Response Rates	11
Minimum Thresholds	14
Parent/Guardian Survey Data Quality Checks	14
Representativeness of Respondents	15
Student Sample	15
Parent/Guardian Sample	17
Teacher Sample	20
Principal/Assistant Principal Sample	21
Support Staff Sample	24
Data Validation and Reliability Testing	25
Item Reliability	25
Topic Validity and Factor Analysis	26
Subtopic and Topic Scoring	27
Scoring Procedure	27
Contact Information	28
References	29
Appendix A: 2023-24 Survey Topics and Subtopics by Respondent Type	30
Appendix B: List of Support Staff Title Codes	36



#### Introduction

The Philly School Experience Survey (PSES) is an annual survey program that has been administered in public schools in the city of Philadelphia since 2014-15. The PSES is organized by the School District of Philadelphia (SDP) Office of Research and Evaluation (ORE) and is administered to school communities serving grades K-12 that are directly operated by the District, contracted alternative schools, and charter schools. Formerly known as the District-Wide Survey (DWS), we introduced the new name (PSES) in 2022-23 to emphasize the core purpose of this survey program: to gather feedback from students, staff, and parents/guardians about their experiences each year, and to monitor organizational conditions in schools associated with school improvement over time and across our school system.

Our overarching goal for the PSES is to collect rigorous, robust, reliable, and actionable data that can be used to improve our city's schools. To this end, this report describes the framework that has guided survey development, revisions to the 2023-24 survey instruments, survey administration processes, and the methods for calculating school-level scores for the core topics in the surveys. It also documents measures of the validity of these surveys, including response rates, representativeness of samples for each survey, and statistical reliability of core topics and subtopics.

## History of the Survey Program

The PSES began in the 2014-15 academic year.<sup>2</sup> The design of the four initial surveys was conducted by researchers in the SDP Office of Research and Evaluation (ORE) and the University of Pennsylvania Graduate School of Education (Penn GSE). The design process drew from 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,<sup>3</sup> who found that five school improvement domains (now called the "5Essentials"<sup>4</sup>) were strongly related to student achievement gains in Chicago Public Schools and schools across Illinois.<sup>5,6</sup> The survey instruments were designed to capture topics similar to the 5Essentials, with questions drawn and/or adapted from prior SDP surveys as well as the 5Essentials surveys.

<sup>&</sup>lt;sup>1</sup> Individual charter schools choose whether to participate in the PSES each year.

<sup>&</sup>lt;sup>2</sup> As mentioned in the introduction, the survey program was originally called the District-Wide Survey, but was renamed in 2023 and will be referred to as Philly School Experience Survey (PSES) throughout this report.

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> See: https://uchicagoimpact.org/our-offerings/5essentials

<sup>&</sup>lt;sup>5</sup> Hart, H., Young, C., Chen, A., Zou, A., & Allensworth, E.M. (2020). Supporting school improvement: Early findings from reexamination of the 5Essentials survey. Chicago, IL: University of Chicago Consortium on School Research.

 $<sup>\</sup>frac{https://consortium.uchicago.edu/sites/default/files/2020-08/Supporting\%20School\%20Improvement\%20}{5Essentials\%20Survey\%20ES-Aug2020-Consortium.pdf}$ 

<sup>&</sup>lt;sup>6</sup> Klugman, J.; Gordon, M.F., Sebring, P.B. and Sporte, S.E. (2015). A First Look at the 5Essentials in Illinois Schools. Chicago, IL: The University of Chicago Consortium on Chicago School Research. <a href="https://consortium.uchicago.edu/publications/first-look-5essentials-illinois-schools">https://consortium.uchicago.edu/publications/first-look-5essentials-illinois-schools</a>



In addition to the five core topics adapted from the 5Essentials, SDP added a new core topic in 2021-22: Diversity, Equity, and Inclusion. This core topic was developed in the winter of the 2020-21 school year by ORE and the newly established Equity Coalition to help us understand the perspectives and experiences of parents/guardians, students, teachers, principals, and school-based staff on Diversity, Equity, and Inclusion in SDP schools. Questions on this topic were adapted from items in existing validated staff and student instruments developed by Panorama Education. The items were piloted in 2020-21, and topic scores were produced for the first time in 2021-22 after statistical analyses (factor analysis and Cronbach's alpha calculations) determined that the measures were reliable.

The stakeholder groups that are invited to complete a PSES survey have expanded over time. In 2014-15, the surveys were conducted with four main respondent groups: students, parents/guardians, teachers, and principals. In 2020-21, the principal survey was expanded to include assistant principals. In 2019-20, ORE developed and piloted a fifth survey for school-based support staff (referred to as "support staff" for brevity) in District and alternative schools. Initially, this respondent group was made up mainly of counselors, nurses, classroom aides, climate staff, psychologists, and secretaries. In 2022-23, in response to requests from school leaders, the positions included in this category were expanded to include food services, facilities, additional climate support, and other positions, increasing the number of District employees eligible to take the survey from around 3,700 in 2021-22 to around 6,800 in 2022-23. In 2023-24, three new positions were added to the list of positions eligible for the support staff survey, and the survey was administered in charter schools for the first time. The full list of positions eligible for the support staff survey in 2023-24 is available in Appendix B.

# Survey Framework

Taken together, the five surveys administered in 2023-24 (student, parent/guardian, teacher, support staff, and principal/assistant principal) were designed to measure six core topics:<sup>8</sup>

- 1. **School Climate** Areas affecting the school environment, including the school mission and vision, respectful relationships, student safety and support, and challenges to student learning.
- 2. **Instructional Environment** Student engagement and how students, parents/guardians, and teachers feel about the teaching and learning environment at their school.

<sup>&</sup>lt;sup>7</sup> The Panorama Equity and Inclusion Surveys: <a href="https://go.panoramaed.com/thanks/measuring-equity-inclusion?submissionGuid=baac0511-51e1-4196-aabd-9c9669cf5dad">https://go.panoramaed.com/thanks/measuring-equity-inclusion?submissionGuid=baac0511-51e1-4196-aabd-9c9669cf5dad</a>

<sup>&</sup>lt;sup>8</sup> The first five topics draw on Bryk and colleagues' (2010) work in Chicago, which identified five essential supports for school improvement. The original names of the five essential supports identified by Bryk and his colleagues were School Leadership, Parent-Community Ties, Professional Capacity, Student-Centered Learning Climate, and Instructional Guidance.



- 3. **School 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. **Family Engagement** 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.
- 6. **Diversity, Equity, and Inclusion** How often issues of race, ethnicity, and culture are addressed in schools, the extent to which all students and staff feel they are valued members of the school community, how integrated and fair school is for students from different backgrounds, and the extent to which schools promote an anti-racist professional culture.

Additionally, each of the six main topics is composed of subtopics that provide information in specific areas where leaders and stakeholders might target their attention. Different topics are generated from questions from different respondent groups; for example, students do not answer questions about Professional Capacity of school staff (Table 1). A list of all topics and subtopics is available in Appendix A .

Table 1: Topics by respondent group

	Topic								
Respondent Groups	School Climate	Instructional Environment		Professional Capacity	Family Engagement	Diversity, Equity and Inclusion			
Parent/Guardian			<b>✓</b>		<b>&gt;</b>	~			
Student	>	~				~			
Teacher	<b>&gt;</b>	~	~	<b>V</b>	<b>V</b>	~			
Principal/ Assistant Principal*	~			V	V	~			
Support Staff*	<b>V</b>		V	V		V			

<sup>\*</sup>Results from principals/APs and support staff are not included in overall topic scores.

Beyond the six core topics, the surveys also include questions on additional topics of interest to stakeholders across our schools and city. Key non-core topic areas in 2023-24 included neighborhood safety, health and nutrition, School Safety Officers, and curriculum.



## Changes to PSES Instruments in 2023-24

While survey instruments were significantly revised and shortened in 2022-23, 9 changes to survey instruments in 2023-24 were more limited. With respect to core topics, there were only two major changes. First, 12 teacher survey questions about District-led professional development were moved outside of the core Professional Capacity topic to ensure that school's Professional Capacity scores would reflect school-based professional development and other issues more within a school's locus of control. The District-led professional development questions were retained in the survey as non-core topics ("District-Led Professional Development Relevance" and "District-Led Professional Development Quality"). The other main core topic change involved the replacement of the former Bullying subtopic on the student survey with a new Peer Conflict subtopic, composed of three questions piloted in 2022-23. Collectively, these three questions were found to constitute a statistically reliable subtopic (Chronbach's alpha = 0.76), and discussion with the Office of School Climate and Culture and Office of Student Rights and Responsibilities found these to be more relevant to District priorities for school climate improvement than the former Bullying questions. Two new pilot items related to bullying and peer conflict were also added to the 2023-24 student survey and may eventually be incorporated in the Peer Conflict subtopic.

A number of changes in 2023-24 involved adding non-core questions to inform monitoring of strategic actions under the District's strategic plan, *Accelerate Philly*, and other District initiatives:

- To inform the evaluation of the new math curriculum implementation, nine items were added to the teacher survey and two items were added to the parent/guardian survey.
- Two items designed to monitor progress with Ninth Grade Success Networks were added to the teacher survey, along with two principal/AP survey items.
- Three questions about school-initiated family/community events were added to the principal/AP survey to inform work on Board of Education Guardrail 3.
- To monitor compliance with Federal Title IX regulations and strategic allocation of athletics resources across high schools, 60 items about Interscholastic Athletics were added for grades 9-12 students, most of which were checklist questions asking students about sports teams they had participated in or would like to participate in in the future.
- Three questions for grades 3-8 students about the frequency and quality of recess were added to support implementation of Strategic Action 1.11 and broader school climate efforts across the District.

In response to feedback from school staff that some survey questions were too difficult for elementary school students, a comprehensive review of introductory text and questions on the student survey was undertaken in 2023. The language in six student survey questions across various topics was simplified to a grade 6 reading level, and six Health and Nutrition items which

<sup>&</sup>lt;sup>9</sup> To learn more about revisions made in 2022-23, see: <a href="https://www.philasd.org/research/wp-content/uploads/sites/90/2024/07/PSES-Technical-Report-2022-23.pdf">https://www.philasd.org/research/wp-content/uploads/sites/90/2024/07/PSES-Technical-Report-2022-23.pdf</a>



could not easily be simplified were recategorized to be made available to grades 6-12 only. The introductory text for the Diversity, Equity, and Inclusion questions on the student and parent/guardian surveys was also simplified to a grade 6 reading level, in collaboration with the Office of Diversity, Equity, and Inclusion.

A few items were removed across the five surveys. In particular, we reduced the number of items in two non-core subtopics on the parent/guardian survey—Family Perceptions of School Climate and Family Perceptions of Instructional Environment—from ten to six items across both subtopics. This allowed us to keep the parent/guardian survey short, even as we added new questions needed for monitoring strategic initiatives. Table 2 shows the total number of items in core and non-core topics by survey for 2022-23 and 2023-24.

Table 2: Number of PSES core and non-core items for each respondent group, 2022-23 and 2023-24

		2022-23			2023-24		
Respondent Group		Number of Core topic items	Number of Non-core items	Total Number of Survey Items	Number of Core topic items	Number of Non-core items	Total Number of Survey Items
Parent/Gu	ıardian	28	24	52	28	22	50
Student	grade 3-5	25	15	40	25	11	36
	grade 6-8	40	41	81	36	41	77
	grade 9-12	40	41	81	36	99	135
Teacher		102	32	134	90	94	184
Principal/AP		51	39	90	52	45	97
Support S	taff	44	24	68	44	25	69

# Survey Administration

#### **Administration Timeline and Process**

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 administration windows for each survey are outlined in Table 3. In 2023-24, the May 1 start date (for students and staff) and close date at the end of the school year (for all respondents) were maintained to make the survey window predictable and easy for stakeholders and survey administrators to remember. The parent/guardian



survey was launched on April 1, since Term 3 report card conferences were scheduled for April 4 and 5.

Table 3: Survey administration windows, 2014-15 through 2023-24

Year	Parent/ Guardian	Student	Teacher	Principal/ Assistant Principal^	Support Staff#	
2014-15	April 20 – June 19, 2015	May 4 – June 19, 2015	May 18 – Jun	ne 19, 2015	N/A	
2015-16	March 31 – Ju	ne 27, 2016	May 3 – May	y 27, 2016	N/A	
2016-17	April 3 – June 23, 2017		April 3 – Jui	ne 5, 2017	N/A	
2017-18	February 12 –	June 8, 2018	March 1 – Ju	N/A		
2018-19	January 28 – J	une 7, 2019	February 25 –	N/A		
2019-20*		Februa	ry 3 – June 15, 2020	)		
2020-21		Marcl	n 1 – May 28, 2021			
2021-22		March	14 - June 10, 2022			
2022-23	March 27 – June 12, 2023	May 1 – June 12, 2023				
2023-24	April 1 - June 14, 2024		May 1 - June 14, 2024			

<sup>\*</sup>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.

#### **Integration with Student Well-Being Survey**

In 2023-24, the PSES administration window overlapped with the third administration window of the Student Well-Being Survey (SWBS), a five-minute survey that was introduced in 2021-22 and is now completed by District students in grades 3-12 three times per year. As in 2022-23, the ORE and the School Climate Office agreed to integrate the two surveys so that students could complete both surveys in one sitting. The SWBS questions were programmed into the PSES survey instrument (but were hidden from students in Charter and Opportunity Network schools). During data processing, the SWBS results were split from the PSES results and analyzed separately.

<sup>^</sup>Assistant principals were included as a respondent group for the first time in 2020-21. They complete the same survey as principals.

<sup>\*</sup>Administered for the first time in 2019-20.

<sup>&</sup>lt;sup>10</sup> For more information, see: <a href="https://www.philasd.org/schoolclimate/#studentsurvey">https://www.philasd.org/schoolclimate/#studentsurvey</a>



#### **Survey Translation**

To accommodate the diverse families served by SDP, efforts have been made to translate the parent/guardian survey into as many languages as possible. In 2023-24, the parent/guardian survey was available in English, Spanish, Mandarin Chinese, Portuguese, Arabic, Vietnamese, French, Russian, Khmer, Albanian, Uzbek, and Bengali. All 12 languages were available in the online parent/guardian survey, and the paper copies of the survey were available in English, Spanish, Portuguese, and Mandarin Chinese. The student survey was available online in English, Spanish, Mandarin Chinese, Portuguese, Arabic, Vietnamese, French, Russian, Khmer, and Albanian.

An archive of all translations of the parent/guardian and student surveys is available on the PSES website.<sup>11</sup>

#### **Survey Modalities**

The surveys were primarily administered online via SurveyMonkey. District students and staff (principals/APs, teachers, and support staff) accessed the survey through their student and employee portals, respectively. Accessing the survey through the official District portals allows each survey to be linked to individual student and staff information, ensuring the validity of responses.

However, because nearly all respondents from Charter and contracted schools did not have access to these portals, additional ways to access the survey were offered. Charter and contracted school teachers, school leaders, and support staff were provided with secure individual links to the survey via their email accounts. The student survey was made available on a publicly accessible link for students at Charter and contracted schools. Students who took the survey via this public website were required to enter a unique District Student ID number in order to access the surveys.

Similar to the student survey for Charter and contracted schools, the parent/guardian survey was also made available on a public website, and this was the most common way that parents and guardians at District, Charter, and contracted schools accessed the survey. Parents and guardians at District schools also had the option of accessing the survey via the online parent portal, similar to how students and staff accessed the survey. Paper copies of the parent/guardian survey were also made available in English, Spanish, Mandarin Chinese, and Portuguese at all District and contracted schools participating in the parent/guardian survey, as well as charter schools that opted into the paper survey option. Schools were allowed to choose whether they would like to have the paper surveys mailed in a box to the school or mailed directly to each household.

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<sup>&</sup>lt;sup>11</sup> philasd.org/pses



Although the paper survey was only available in four languages, it was accompanied by a letter with information in 12 languages about how to access the survey in multiple languages online. About 8% of parent/guardian surveys were returned on paper, and an additional 5% were taken online following receipt of the paper survey and accompanying letter. Compared to English language surveys, Spanish, Portuguese, and Chinese language surveys were more frequently submitted on paper; 16% of Spanish, 15% of Portuguese, and 13% of Chinese language surveys were taken on paper, compared to just 7% of English language surveys.

#### Parent/Guardian Survey Anonymity

Prior to 2022-23, the parent/guardian survey could only be accessed with a valid student ID, and the response rate for parents/guardians had not risen above 15% for many years. In 2022-23, the parent/guardian survey was made completely anonymous, allowing parents and guardians to immediately take the survey as soon as they heard about it, without having to contact the school or spend time looking for their student's ID number. The transition to an anonymous parent/guardian survey was associated with an increase in the parent/guardian response rate from 14% to about 25%. In 2023-24, the policy of anonymity was maintained, and the higher response rate was sustained, at just 0.4 percentage points lower than in 2022-23.

#### **Strategies for Increasing Response Rates**

Since response rates are important to the validity of the survey results, the PSES team used a number of strategies from prior years along with new strategies to increase response rates in 2023-24:

- Online gift card raffle for parents/guardians and staff: As in previous years, parents/ guardians and staff who completed the survey were given the opportunity to enter a raffle to receive an online gift card.
- Maintaining short student and parent/guardian surveys: The parent/guardian survey was kept as brief as possible, with just 50 items, and the student survey was reduced in length for grades 3-8 students (although new questions were added for high school students). Communications to families and school staff highlighted the reduction in length to attract respondents and school staff administering the survey to younger students who may have been frustrated by longer surveys in prior years.
- Parent/guardian survey anonymity: As discussed in the preceding section, the practice of requiring families to look up their child's ID number was removed to ensure that parents could immediately take the survey without impediment.

 $<sup>^{12}</sup>$  This statistic is based on responses to a question on the parent/guardian survey asking respondents what led them to take the survey.



- Enhanced engagement with school staff, including new "Survey Champions": The PSES team continued the practice of encouraging principals to nominate a staff member to serve as a "Survey Champion" to be in direct communication with the PSES team on matters of survey administration. A total of 179 schools had Survey Champions in 2023-24, and these Champions were offered training sessions and "office hours" with the PSES team and received regular email updates about key deadlines and administration procedures.
- **Streamlined resources and communications:** In 2022-23, the PSES team simplified messaging and reorganized the available resources to make them easier to use. These practices were maintained and refined in 2023-24.

Similar to prior years, schools also employed a range of strategies for generating strong response rates, including:

- **Email/phone reminders**: Most schools sent email reminders, and some used robocalls and text messages explaining the importance of the PSES and how to complete it.
- **School events**: Many schools used school events such as report card conferences, concerts, and sports activities as opportunities to distribute paper surveys and letters or direct families to the online survey via the short url or QR code.
- **Flyers:** Schools posted flyers provided by the PSES Team with QR codes linking to the surveys in the school front office or other prominent locations, and some schools created their own flyers and promotional materials.
- **Incentives:** Many schools organized incentives such as pizza parties for the grade level with the most completed student surveys.

## Response Rates

For each survey group, we calculate response rates based on the number of individuals that submitted a survey out of the total population that was eligible to participate. Response rates are calculated separately for each survey group and reported by school, by network, by sector, and overall.

The numerator for each response rate is based on the number of individuals who submitted a valid survey. The survey platform allows multiple entries from the same respondent; however, for all respondents except parents and guardians, we removed duplicate entries by taking the most complete or most recent response. Although parents and guardians were provided with guidance that each household should submit just one survey response for each school attended by their children, duplicate entries for the parent and guardian survey could not be identified because the survey was anonymous, and the parent and guardian response rate should be considered as an estimate.



The denominator for each response rate is based on the total population that was eligible to participate. The process for identifying this population involved data sources specific to each survey group:

- The student population was identified using an enrollment snapshot taken during the survey window. Each student enrolled on May 1, in grades 3-12, was counted once in the denominator.
- The parent and guardian population was identified by linking the same student enrollment snapshot to household information and counting each household once per school.
- The staff population (teachers, support staff, and principals/assistant principals) were identified differently for District and non-District (Charter and contracted) schools:
  - The District staff population was identified using internal employee records assigned to each school location with active employment on May 1.
  - The contracted and Charter school staff population was identified using staff lists provided by each school.

In some cases, an individual was associated with a different school location in the numerator and the denominator. This can occur if a student enrolls in a different school after the enrollment snapshot date and submits a survey response at their new school. In such cases, the denominator was adjusted so that the individual was counted in both the numerator and the denominator for the school where their response is attributed (and not counted in any other school).

Table 4 shows the response rates (and number of responses) for each respondent group over time, from 2014-15 to 2023-2024.



Table 4: Response rates from 2014-15 to 2023-2024 (number of responses shown in parentheses)

Year	Student	Parent/ Guardian <sup>i</sup>	Teacher	Principal/ Assistant Principal <sup>ii</sup>	Support Staff <sup>iii</sup>
2014-15	33% (46,695)	7% (13,360)	53% (5,423)	64% (185)	-
2015-16	50% (73,187)	13% (25,911)	51% (5,688)	73% (241)	-
2016-17	50% (72,580)	16% (30,968)	56% (6,515)	57% (184)	-
2017-18	54% (80,101)	17% (33,334)	54% (6,652)	60% (199)	-
2018-19	61% (89,496)	23% (35,055)	56% (6,663)	56% (185)	-
2019-20	32% (47,439)	16% (25,915)	64% (6,986)	48% (168)	37% (1,311)
2020-21	42% (62,353)	16% (24,313)	68% (8,267)	45% (242)	43% (1,525)
2021-22	48% (67,180)	14% (20,682)	59% (7,065)	68% (419)	36% (1,381)
2022-23	55% (75,636)	25% (36,384)	68% (8,141)	80% (540)	45% (3,078)
2023-24	62% (76,133)	24% (33,539)	66% (8,038)	57% (854)	43% (4,178)

Note: Because employee information is only available for participating charter schools, Charter schools are only included if they participated in the survey in question.

<sup>&</sup>lt;sup>i</sup>Two key changes have occurred in the parent/guardian response rate calculation: Prior to 2018-19, the response rate for this group was based on the total number of enrolled students. Since 2018-19, this response rate has been based on households rather than individual students. Additionally, in 2022-23, this survey became anonymous and duplicate entries can no longer be identified. As a result, the response rate should now be considered an estimate, since it may contain multiple entries from the same household. <sup>ii</sup> The principal survey began including responses from assistant principals beginning in 2020-21. Charter and contracted schools identify school leaders with roles equivalent to the SDP principal/SDP position.

<sup>&</sup>lt;sup>iii</sup> The support staff survey was first administered in 2019-20. In 2022-23, the list of title codes eligible for this survey was expanded significantly to include food services, facilities, and other positions. Charter schools were included in the support staff survey for the first time in 2023-24.



#### Minimum Thresholds

Minimum response rate thresholds are used to ensure that our sample sizes are large enough for valid analysis. Additionally, we require a minimum number of responses for reporting results for a given group of respondents in order to protect the confidentiality of each individual respondent. If the thresholds in Table 5 are not met, we suppress the survey results and do not publish them. Note that these thresholds have differed in prior years; Table 5 shows the rules applied to all products in 2023-24.

Table 5: 2023-24 survey participation thresholds

Survey	Threshold			
Student	25% response rate and at least 5 responses			
Parent/Guardian	10% response rate and at least 5 responses			
Teacher	25% response rate and at least 5 responses			
Support Staff	25% response rate and at least 5 responses			
Principal/Assistant Principal	25% response rate and at least 5 responses			

# Parent/Guardian Survey Data Quality Checks

Because the parent/guardian survey was publicly accessible, we took additional steps to ensure data quality in 2023-24. First, we removed incomplete responses to ensure that any respondent who did not complete the survey and returned to complete it later would not be duplicated in the results. To detect any responses generated by Internet bots, we built an automated data quality assessment script that identified suspicious response characteristics, such as survey responses with school names not present in the District, responses indicating a student grade level not available in the selected school, responses submitted more quickly than humanly possible, or clusters of surveys submitted in close succession with characteristics that were both identical and unlikely.<sup>13</sup>

<sup>13</sup> Examples of such patterns include a succession of surveys with identical demographic characteristics submitted for the same school in a short time frame, or a succession of surveys with the same IP address submitted late at night.



# Representativeness of Respondents

We examined the extent to which survey respondents were representative of the larger population to identify whether certain groups' viewpoints may be given more weight than others. Respondent characteristics for each respondent group were compared to the characteristics of the corresponding target population to assess representativeness, or external validity.

#### **Student Sample**

Overall, the 2023-24 student survey sample had similar demographic characteristics to the target population, with some exceptions that aligned with patterns observed in previous years (see Table 6). <sup>14</sup> The student respondents from District schools had nearly the same gender distribution as the broader student population. The District PSES student sample was representative of most racial/ethnic groups as well. However, Black/African American students were slightly under-represented—41% of District respondents were Black/African American, compared to 44% of all grade 3-12 students. <sup>15</sup>

The Charter school sample was roughly representative of Charter school students by gender, with the percentage of male and female respondents falling within three percentage points of the student population. The sample was less representative with respect to race/ethnicity: although 59% of grade 3-12 Charter students were Black/African American, only 44% of Charter students who responded to the PSES were Black/African American.

<sup>&</sup>lt;sup>14</sup> See the 2022-23 Technical Report and this 2019-20 study: <a href="https://www.philasd.org/research/2021/10/12/representativeness-of-the-2019-20-district-wide-student-and-parent-guardian-survey-results-2/">https://www.philasd.org/research/2021/10/</a> 12/ representativeness-of-the-2019-20-district-wide-student-and-parent-guardian-survey-results-2/

<sup>&</sup>lt;sup>15</sup> With the exception of parent/guardian responses, the differences between survey respondent and target population characteristics that are directly discussed in this section have been confirmed to be statistically significant (p<.05) using a Chi-Square Goodness of Fit test.



Table 6. Distribution of all grade 3-12 District and Charter students enrolled in 2023-24 by race/ethnicity and gender compared to student PSES respondents

	<b>District Students</b> in Grades 3-12 (n=88,123)			Charter Students in Grades 3-12 (n=61,861)		
	% of total students enrolled (a)	% of student respondents (b)	Difference (% points) (c)	% of total students enrolled (d)	% of student respondents (e)	Difference (% points) (f)
Race/Ethnicity						
Black/African American	44%	41%	-3	59%	44%	-15
Hispanic/Latine	26%	28%	+2	19%	24%	+5
White	14%	16%	+2	12%	19%	+7
Asian	11%	12%	+1	4%	7%	+3
Multi-Racial/Other*	4%	4%	0	5%	6%	+1
Gender						
Male	52%	51%	-1	51%	48%	-2
Female	48%	49%	+1	49%	52%	+2
Non-Binary	<1%	<1%	0	i.s.	i.s.	i.s.

<sup>\*</sup>Includes American Indian/Alaskan Native and Native Hawaiian/Pacific Islander

**Note:** District and Charter enrollment and PSES respondent information is based on May 1, 2024 enrollment. **How to read this table:** This table allows you to compare the percentage of total students enrolled (columns a and d) to the percentage of student respondents (columns b and e). The percentage point differences between the columns are in columns c and f. When the difference is positive, that means a higher percentage of students of that race/ethnicity or gender completed the survey compared to the percentage of students of that race/ethnicity or gender enrolled. When the difference is negative, the reverse is true. For example, 44% of grade 3-12 District students were Black/African American in 2023-24 and 41% of all District PSES respondents were Black/African American.



Notably, District high school students were underrepresented in the student survey, whereas elementary school students were overrepresented (Table 7).

Table 7. Distribution of all grade 3-12 District and Charter students enrolled in 2023-24 by grade level compared to student PSES respondents

	District S	<b>Students</b> in Grad (n=87,208)	des 3-12	<b>Charter Students</b> in Grades 3-12 (n=61,861)		
Grade	% of total students enrolled (a)	% of student respondents (b)	Difference (% points) (c)	% of total students enrolled (d)	% of student respondents (e)	Difference (% points) (f)
3	10%	13%	+3	10%	13%	+3
4	10%	14%	+4	10%	13%	+3
5	10%	13%	+3	10%	12%	+2
6	10%	12%	+2	11%	12%	+1
7	10%	11%	+1	11%	13%	+2
8	10%	11%	+1	11%	12%	+1
9	11%	7%	-4	10%	8%	-2
10	11%	6%	-5	10%	7%	-3
11	10%	5%	-5	9%	6%	-3
12	9%	7%	-2	9%	6%	-3

**Note:** District and Charter enrollment and PSES respondent information is based on May 1, 2024 enrollment. Students in grades K-2 do not participate in the PSES.

**How to read this table**: This table allows you to compare the percentage of total students enrolled (columns a and d) to the percentage of student respondents (columns b and e). The percentage point differences between the columns are in columns c and f. When the difference is positive, that means a higher percentage of students in that grade completed the survey compared to the percentage of students enrolled in that grade. When the difference is negative, the reverse is true. For example, grade 5 District students represent 10% of all grade 3-12 District students and 13% of grade 3-12 District PSES responses. On the other hand, grade 10 District students represent 11% of grade 3-12 District students and 6% of District PSES responses.

#### Parent/Guardian Sample

Because demographic information for the full population of parents and guardians is not available, we use student demographic information as a proxy for parent/guardian demographics in reviewing the parent/guardian PSES sample. Although parents/guardians do not necessarily have the same characteristics as their children, comparing the characteristics of students whose parents responded to those of the broader student population provides an estimate of the extent to which the parent/guardian sample is representative. Once the parent/guardian survey was made



anonymous in 2023-24, we could not link households' responses with their students' demographic information. Instead, we relied on questions in the parent/guardian survey.

In 2023-24, the parent/guardian survey sample included a broad representation of students of different races/ethnicities and grade levels. However, while 43% of District students were Black/African American, only 35% of the parent/guardian respondents said their students were Black/African American, and a similar pattern was found for parents of Hispanic/Latine students (Table 8). The percentage of District and Charter families who reported their students were multi-racial or a race other than Black/African American, Hispanic/Latine, White, or Asian was much higher than the percentage of students identified under these categories in District administrative records. These differences could be due in part to the fact that the racial/ethnic distribution for the population is estimated using administrative data on student characteristics, whereas the student characteristics information used for assessing the parent/guardian PSES samples is reported by parents as part of the survey.

Table 8. Distribution of all District and Charter students enrolled in 2023-24 by race/ethnicity compared to students whose parents/guardians responded to the PSES

	District	<b>District Students</b> in Grades K-12 (n=113,979)			<b>Charter Students</b> in Grades K-12 (n=79,140)				
	% of total students enrolled (a)	% of students of parent/guardian respondents (b)	Difference (% points) (c)	% of total students enrolled (d)	% of students of parent/guardian respondents (e)	Difference (% points) (f)			
Race/Ethnicity	Race/Ethnicity								
Black/ African American	43%	35%	-8	58%	35%	-25			
Hispanic/Latine	27%	23%	-4	20%	23%	-4			
White	15%	19%	+4	12%	19%	+7			
Asian	11%	10%	-1	4%	10%	+6			
Multi-Racial/Other*	4%	12%	+8	6%	12%	+7			

<sup>\*</sup>Includes American Indian/Alaskan Native and Native Hawaiian/Pacific Islander

**Notes:** District and Charter enrollment is based on May 1, 2024 enrollment. PSES respondent information was self-reported by parents and guardians on questions within the survey. 456 District responses and 83 Charter responses were removed due to missing data on the race/ethnicity question.

**How to read this table**: This table allows you to compare the percentage of total students enrolled (columns a and d) to the percentage of students whose parent/guardian responded to the survey (columns b and e). The percentage point differences between the columns are in columns c and f. When the difference is positive, a higher percentage of students of that race/ethnicity had a parent or guardian who completed the survey compared to the percentage of students of that race/ethnicity who are enrolled. When the difference is negative, the reverse is true.



Similar to the student PSES sample, the parent/guardian sample was not fully representative of the population with respect to student grade levels. The proportion of parents/guardians of students in grades 1-3 who took the survey was higher than the proportion of parents/guardians of high school students (Table 9).

Table 9. Distribution of all grade K-12 District and Charter students enrolled in 2022-23 by grade level compared to students with parents/guardians who responded to the PSES

	Distric	ct <b>Students</b> in Grade (n=113,979)	<b>Charter Students</b> in Grades K-12 (n=79,140)			
Grade	% of total students enrolled (a)	% of students of parent/guardian respondents (b)	Difference (% points) (c)	% of total students enrolled (d)	% of students of parent/guardian respondents (e)	Difference (% points) (f)
K	8%	16%	+8	7%	12%	+5
1	8%	11%	+3	7%	11%	+4
2	8%	11%	+3	8%	11%	+3
3	8%	11%	+3	8%	11%	+3
4	8%	10%	+2	8%	10%	+2
5	8%	9%	+1	8%	10%	+2
6	7%	8%	+1	8%	8%	0
7	7%	7%	0	9%	7%	-2
8	7%	7%	0	9%	7%	-2
9	8%	4%	-4	8%	4%	-4
10	8%	4%	-4	7%	4%	-3
11	7%	3%	-4	7%	3%	-4
12	7%	4%	-3	7%	4%	-3

**Note:** District and Charter enrollment and PSES respondent information is based on May 1, 2024 enrollment. **How to read this table:** This table allows you to compare the % of total students enrolled (columns a and d) to the percentage of students whose parent/guardian responded to the survey (columns b and e). The percentage point differences between the columns are in columns c and f. When the difference is positive, that means there is a higher percentage of students in that grade whose parent or guardian completed the survey compared to the percentage of students who are enrolled in that grade. When the difference is negative, the reverse is true.



#### **Teacher Sample**

District teachers who responded to the 2023-24 PSES were largely representative of the broader teaching population with respect to race/ethnicity and gender as identified in the employee administrative records (Table 10), although White teachers responded at slightly higher rates than Black/African American teachers, and female teachers responded at slightly higher rates than male teachers. Demographic data was not available for Charter and contracted school teachers.

Table 10. Demographic characteristics of teachers employed at District schools compared to District teachers who completed the PSES in 2023-24

	<b>District Teachers</b> (n =6,293)						
	% of total teachers (a)	% of teacher respondents (b)	Difference (% points) (c)				
Race/Ethnicity							
White	59%	61%	+2				
Black/African American	21%	19%	-2				
Hispanic/Latine	4%	4%	0				
Asian/Pacific Islander	3%	2%	-1				
Multi Racial/Other*	14%	14%	0				
Gender							
Female	73%	75%	+2				
Male	27%	24%	-3				

<sup>\*</sup>Includes American Indian/Alaskan Native and "Prefer not to disclose"

**Note:** District employment and PSES respondent information is based on May 1, 2024 records.

**How to read this table**: This table allows you to compare the percentage of total teachers (column a) to the percentage of teacher respondents (column b). The percentage point differences between the columns are in column c. When the difference is positive, that means a higher percentage of teachers with that demographic characteristic completed the survey compared to the percentage of teachers with that demographic characteristic overall. When the difference is negative, the reverse is true.



High school teachers were underrepresented in the survey compared to teachers at Elementary and K-8 schools (Table 11).

Table 11. School level of all District teachers compared to teacher PSES respondents, 2023-24

School Level	District Teachers (n =6,293)				
(Grades Served)	% of total teachers (a)	% of teacher respondents (b)	Difference (% points) (c)		
Elementary (K-2, K-4, K-5, K-6, 3-5)	19%	22%	+3		
Elementary-Middle (K-8)	44%	47%	+3		
Elementary-Middle-High (K-12)	1%	0%	-1		
Middle (5-8, 6-8, 7-8)	6%	6%	0		
Middle-High (5-12, 6-12, 7-10, 7-12)	4%	3%	-1		
High (9-12)	27%	22%	-5		

**Note:** District employment and PSES respondent information is based on May 1, 2024 records. **How to read this table:** This table allows you to compare the percentage of total teachers (column a) to the percentage of teacher respondents (column b). The percentage point differences between the columns are in column c. When the difference is positive, that means a higher percentage of teachers from schools in that grade level completed the survey compared to the percentage of teachers from schools in that grade level overall. When the difference is negative, the reverse is true.

#### **Principal/Assistant Principal Sample**

The gender distribution of District school leaders in the 2023-24 PSES was roughly proportional to the overall population of school leaders, and the difference in male and female school leader response rates was not statistically significant. However, White school leaders responded at higher rates than Black/African American and Hispanic/Latine school leaders (Table 12). Demographic data was not available for Charter and contracted school leaders.



Table 12. Demographic characteristics of principals and assistant principals employed at District schools, compared to District principals and assistant principals who completed the PSES in 2023-24

	District Principals and Assistant Principals (n = 346)			
	% of total principals and assistant principals (a)	% of principal and assistant principal respondents (b)	Difference (% points) (c)	
Race/Ethnicity				
Black/African American	54%	49%	-5	
White	36%	40%	+4	
Hispanic/Latine	5%	6%	+1	
Asian/Pacific Islander	1%	1%	0	
Multi Racial/Other*	4%	3%	-1	
Gender				
Female	67%	70%	+3	
Male	33%	30%	-3	

<sup>\*</sup>Includes American Indian/Alaskan Native and "Prefer not to disclose"

**Note:** District employment and PSES respondent information is based on May 1, 2024 records.

How to read this table: This table allows you to compare the percentage of total principals and assistant principals (column a) to the percentage of principal and assistant principal respondents (column b). The percentage point differences between the columns are in column c. The percentage point differences between the columns are in column c. When the difference is positive, that means a higher percentage of principals and assistant principals with that demographic characteristic completed the survey compared to the percentage of principal and assistant principals with that demographic characteristic overall. When the difference is negative, the reverse is true.



High school leaders responded at lower rates than those at elementary and K-8 schools (Table 13).

Table 13. School level of all District principals and assistant principals compared to District principal and

assistant principal PSES respondents, 2023-24

	District Principals and Assistant Principals (n = 346)			
School Level (Grades Served)	% of total principals and assistant principals (a)	% of principal and assistant principal respondents (b)	Difference (% points) (c)	
Elementary (K-2, K-4, K-5, K-6, 3-5)	17%	21%	+4	
Elementary-Middle (K-8)	42%	44%	+2	
Elementary-Middle-High (K-12)	1%	1%	0	
Middle (5-8, 6-8, 7-8)	7%	8%	+1	
Middle-High (5-12, 6-12, 7-10, 7-12)	4%	2%	-2	
High (9-12)	29%	24%	-4	

**Note:** District employment and PSES respondent information is based on May 1, 2024 records. **How to read this table:** This table allows you to compare the percentage of total principals and assistant principals (column a) to the percentage of principal and assistant principal respondents (column b). The percentage point differences between the columns are in column c. When the difference is positive, that means a higher percentage of principals and assistant principals from schools serving those grade levels completed the survey compared to the percentage of principals and assistant principals from schools serving those grade levels overall. When the difference is negative, the reverse is true.



# **Support Staff Sample**

Female support staff and White support staff in District schools were overrepresented in the support staff survey, while male support staff and Black/African American support staff were underrepresented (Table 14). Demographic data was not available for Charter and contracted school leaders.

Table 14. Demographic characteristics of support staff employed at District schools compared to support staff who completed the PSES in 2023-24

	District Support Staff (n = 3,492)		
	% of total support staff (a)	% of support staff respondents (b)	Difference (% points) (c)
Race/Ethnicity			
Black/African American	62%	52%	-10
White	18%	25%	+7
Hispanic/Latino	9%	11%	+2
Asian/Pacific Islander	2%	2%	0
Multi Racial/Other*	9%	10%	+1
Gender			
Female	77%	83%	+6
Male	23%	17%	-6

<sup>\*</sup>Includes American Indian/Alaskan Native and "Prefer not to disclose"

**Note:** District employment and PSES respondent information is based on May 1, 2024 employee records. **How to read this table:** This table allows you to compare the percentage of total support staff (column a) to the percentage of support staff respondents (column b). The percentage point differences between the columns are in column c. When the difference is positive, that means a higher percentage of support staff with that demographic characteristic completed the survey compared to the percentage of support staff with that demographic characteristic overall. When the difference is negative, the reverse is true.



Support staff from elementary and K-8 schools were overrepresented in the PSES results and support staff from high schools were underrepresented (Table 15).

Table 15. School level of all District support staff compared to support staff PSES respondents, 2022-23.

	District Support Staff (n = 3,492)			
School Level (Grades Served)	% of total support staff (a)	% of support staff respondents (b)	Difference (% points) (c)	
Elementary (K-2, K-4, K-5, K-6, 3-5)	20%	24%	+4	
Elementary-Middle (K-8)	48%	51%	+3	
Elementary-Middle-High (K-12)	1%	0%	-1	
Middle (5-8, 6-8, 7-8)	6%	6%	0	
Middle-High (5-12, 6-12, 7-10, 7-12)	3%	2%	-1	
High (9-12)	21%	16%	-5	

**Note:** District employment and respondent information is based on May 1, 2024 employee records. **How to read this table:** This table allows you to compare the percentage of total support staff (column a) to the percentage of support staff respondents (column b). The percentage point differences between the columns are in column c. When the difference is positive, that means a higher percentage of support staff from schools in those grade levels completed the survey compared to the percentage of support staff from schools in those grade levels overall. When the difference is negative, the reverse is true.

# Data Validation and Reliability Testing

#### **Item Reliability**

To assess the internal consistency of the survey items within each topic and subtopic, ORE calculated Cronbach's alphas for each of the six topics 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 on the 2014-15 results and repeated the analysis again with the results from the 2018-19, 2020-21, 2021-22, 2022-23, and 2023-24 survey administrations. In 2023-24, we discontinued the practice of generating principal/assistant principal topic scores given weaker Chronbach's alpha values in 2022-23, and limited value of these topic scores (since they cannot be used at the school level).

Scale reliabilities for all topic scores fell between 0.83 and 0.96, which indicates an acceptable internal consistency between items within each topic and subtopic without item redundancy (Nunnally & Bernstein, 1994). Table 16 provides the alphas for the six topics as measured across the four surveys.

<sup>&</sup>lt;sup>16</sup> Technical reports for previous years are available here: <a href="mailto:philasd.org/pses">philasd.org/pses</a>



Table 16. Cronbach's Alpha for survey constructs (topics), 2023-24

Topics	Student	Parent/ Guardian	Teacher	Support Staff
School Climate	.89	n/a	.93	.89
Instructional Environment	.94	n/a	.87	n/a
School Leadership	n/a	.95	.96	.95
Professional Capacity	n/a	n/a	.90	.93
Family Engagement	n/a	.92	.83	n/a
Diversity, Equity and Inclusion	.87	.85	.86	.89

#### **Topic Validity and Factor Analysis**

In 2014-15, 2016-17, and 2018-19, we used exploratory factor analysis (EFA) to explore the dimensionality of the five original 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 topics 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 topics and subtopics. Overall, the EFAs confirmed the validity of the five original topics and their subtopics. Additional methodological details for these EFAs are available in technical reports for previous years, which are posted to the PSES website (philasd.org/pses).

As in past years, we conducted confirmatory higher order factor analysis on the 2023-24 dataset to provide evidence that the previously constructed factors were still a reasonable structure to organize the survey data. Each survey was organized into higher order factors and associated subfactors. Higher order factors were correlated. Fit indices including the Comparative Fit index (Bentler, 1990), the Tucker-Lewis Index (Tucker & Lewis, 1973), the Root Mean Square Error of Approximation (Steiger & Lind, 1980), and the Standardized Root Mean Square (Bentler, 1995) were used to assess overall fit of these models. Because students in grade 3 through 5 do not answer all of the items in the student survey, separate models were constructed for grades 3 through 5 and grades 6 through 12. Due to the large number of items in the teacher survey, distributional parceling was used.

Overall, the model for grades 3 through 5 student survey responses (CFI = .96, TLI = .95, RMSEA = .04, and SRMR = .04) and the parent survey (CFI = .96, TLI = .96, RMSEA = .05, and SRMR = .03) had very good model fit . The model for grades 6 through 12 student responses (CFI = .92, TLI = .91, RMSEA = .06, and SRMR = .08), the support staff survey (CFI = .92, TLI = .91, RMSEA = .05, and SRMR = .07) had

 $<sup>^{17}</sup>$  In the rest of this report and in other PSES products, we refer to these as "topics" and "subtopics."



acceptable fit. The acceptable model fit and topic score reliability for the support staff survey suggest we could consider including support staff results in overall topic scores in future years.

# Subtopic and Topic Scoring

The survey results for each subtopic and topic area can be represented as a single numeric score on a scale from 0-10. Higher values indicate more favorable responses, while lower values indicate more unfavorable responses. Note that not all subtopics and topics are relevant to all respondent groups; each respondent group contributes to a different set of topic scores. The following types of scores are calculated and reported:

- Subtopic scores for each survey respondent group
- Topic scores for each survey respondent group
- Topic scores produced from subtopic scores from all *applicable* respondent groups

The respondent groups applicable to each topic score are noted in Table 1.

#### **Scoring Procedure**

Responses for each survey question are first converted to a numeric scale from 0-10, where 10 represents the most favorable response. For example, for the student question "I feel welcome in my school," a response of "most or all of the time" is assigned the value 10. Subtopic scores are calculated separately for each respondent group by taking the average scaled response value for all question responses within the subtopic. Each individual question response carries equal weight and skipped questions (or "N/A" type answers) are disregarded. If the minimum reporting thresholds are not met for the respondent group (i.e., the respondent group within the school, group of schools, or a given demographic group), the subtopic scores are suppressed and not reported. Additionally, some schools or groupings may not receive a subtopic score because the relevant questions are not applicable. For example, schools serving only lower grades do not receive Diversity, Equity, and Inclusion subtopic scores for students because these questions are only for grades 6 and above.

Topic scores are based on the average of all subtopic scores from each topic area. This calculation is made for each respondent group separately and for all respondent groups combined. In both cases, each subtopic score carries equal weight. If any subtopic score is unavailable, either due to suppression or non-applicability, the topic score is suppressed and not reported. This step ensures that topic scores are always calculated in a consistent manner using the same subtopics.

Because the survey instruments and procedures change from year to year, subtopic and topic scores are recalculated for prior years using current year rules and question assignments. For example, a set of new Peer Conflict questions were introduced in the student survey in 2022-23, and in 2023-24 the Peer Conflict subtopic replaced the former Bullying subtopic under the overall School Climate topic. School Climate scores were recalculated this year for both 2022-23 and 2023-24 to reflect the updated topic composition. 2021-22 School Climate scores were not included in 2023-24 reporting because the Peer Conflict questions were not available in that year. All such changes to



scoring procedures are applied retroactively so that year-over-year differences in topic scores can be attributed to changes in respondent sentiment rather than to changes in survey design or scoring procedures.

#### **Contact Information**

If you have any questions, please contact The Office of Research and Evaluation at <a href="mailto:schoolsurveys@philasd.org">schoolsurveys@philasd.org</a>.



#### References

- Aleamoni, L. M. (1976). The relation of sample size to the number of variables in using factor analysis techniques. *Educational and Psychological Measurement*, *36*, 879–883.
- Baggaley, A. R. (1983). Deciding on the ratio of number of subjects to number of variables in factor analysis. *Multivariate Experimental Clinical Research*, 6(2), 81–85.
- 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.
- Child, D. (1990). The essentials of factor analysis (2nd ed.). London: Cassel Educational Limited.
- Costello, A. B., & Osborne, J. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment Research & Evaluation*, 10(7).
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–334.
- Ford, J. K., MacCallum, R. C., & Tait, M. (1986). The application of exploratory factor analysis in applied psychology: A critical review and analysis. *Personal Psychology*, 39, 291–314.
- Kaiser, H. F. (1970). A. second generation Little-Jiffy. *Psychometrika*, 35, 401–415.
- Nunnally, J. C., & Bernstein, I. (1994). Psychometric theory (3rd ed.). New York: McGraw-Hill.
- Thorndike, R. M., Cunningham, G. K., Thorndike, R. L., & Hagen E. P. (1991). *Measurement and evaluation in psychology and education*. New York: Macmillan Publishing Company.



# Appendix A: 2023-24 Survey Topics and Subtopics by Respondent Type

Student		1
Topic	Subtopic	Number of Items
School Climate	Belonging	4
	Building Condition	3
	Peer Conflict	3
	School Safety	5
	Overall	19
Supplemental	Peer Conflict and Bullying (Pilot)	3
Climate Information	Recess (Pilot)	3
	Overall	6
Instructional Environment	Supportive Classrooms / Overall	13
Diversity, Equity, and	Cultural Awareness and Action	4
Inclusion	<b>Educating all Students</b>	4
	Overall	8
Other	College and Career	2
	Demographics	2
	Extracurricular Activities	3
	Interscholastic Athletics	61
	Food Insecurity	1
	Food Services	3
	Mode of Transportation	1
	Neighborhood Safety	2
	Nutrition	4
	Physical Activity	1
	School Counselors	1
	School Safety Officers	3
	Technology Access	2
	Other	11
	Overall	97



Parent/Guardian		
Topic	Subtopic	Number of Items
Family Perceptions of School Climate	Family Perceptions of School Climate / <b>Overall</b>	2
Supplemental Instructional Environment Information	Family Perceptions of Instructional Environment / Overall	2
Family Engagement	Communicating with Families	7
	Parent/Guardian Involvement	4
	School-Family Relationships	5
	Overall	16
School Leadership	Inclusive Leadership / <b>Overall</b>	5
Diversity, Equity, and Inclusion	Belonging	3
	Cultural Awareness and Action	4
	Overall	7
Other	Demographics	2
	Other	5
	Overall	7
Health and Nutrition	Food Insecurity / <b>Overall</b>	5
Technology	Technology Access / <b>Overall</b>	2
Curriculum	Math Curriculum / <b>Overall</b>	2
Enrichment	After School Enrichment / <b>Overall</b>	2



Teacher		
Topic	Subtopic	Number of Items
School Climate	Attendance	4
	Classroom Level Challenges to Student Learning	5
	Respect	8
	School Level Challenges to Student Learning	13
	School-Wide Learning Climate	7
	Overall	37
Instructional Environment	Student Engagement / Overall	12
Family Engagement	Teacher Outreach to Parents/Guardians / Overall	6
School Leadership	Expectations and Feedback	6
	Inclusive Leadership	5
	Overall	11
Professional	School-Based PD	3
Capacity	Support for Innovation	3
	Teacher Collaboration	7
	Overall	13
Diversity, Equity, and Inclusion	Anti-Racist Professional Culture	4
	Belonging	3
	Cultural Awareness and Action	4
	Overall	11



Teacher		
Topic	Subtopic	Number of Items
Other	Attendance and Dropout	2
	Implementation/Awareness of Goals and Guardrails	9
	Neighborhood Safety	1
	Other External Challenges	2
	School Safety Officers	3
	Other	8
	Conditions for Success	2
	Curriculum	20
	Overall	47
Supplemental Climate Information	Discipline / <b>Overall</b>	7
Supplemental	District-Led PD Quality	7
Professional Capacity	District-Led PD Relevance	5
-	Ninth Grade Success Networks	11
	Trauma-Informed Practices	3
	Overall	26



Principal/Assistant Principal		
Topic	Subtopic	Number of Items
School Climate	Attendance	4
	Respect	7
	School Level Challenges to Student Learning	14
	Overall	32
Family Engagement	Principal Relationship with Parents/Guardians / <b>Overall</b>	4
Supplemental Family Engagement	Family/community Events/ <b>Overall</b>	3
Professional	Coaching and Collaboration	5
Capacity	PD for School Leaders	7
	Overall	12
Supplemental Professional Capacity	Ninth Grade Success Networks/ <b>Overall</b>	1
Diversity, Equity, and Inclusion	Belonging	3
	Cultural Awareness and Action	8
	Overall	11
Other	Attendance and Dropout	15
	Awareness/Implementation of Goals and Guardrails	10
	Food Insecurity	1
	Health	1
	Mental Health	1
	Neighborhood Safety	1
	Other External Challenges	4
	School Safety Officers	3
	Other	3



School Support Staff			
Topic	Subtopic	Number of Items	
School Climate	Challenges to Student Learning	12	
	Respect	9	
	Overall	21	
School Leadership	Inclusive Leadership / Overall	6	
Professional	Trauma-Informed Practices	4	
Capacity	Knowledge of Student Supports	5	
	Overall	9	
Diversity, Equity, and	Belonging	3	
Inclusion	Cultural Awareness and Action	5	
	Overall	8	
Other	Attendance and Dropout	2	
	Awareness/Implementation of Goals and Guardrails	9	
	Neighborhood Safety	1	
	Support Staff Resources	3	
Γ	Support Staff Role Clarity	5	
Γ	Other	4	



# Appendix B: List of Support Staff Title Codes

TITLE CODE	TITLE
0199	ACADEMIC COACH
0230	ASSISTANT PROGRAM COORD
0486	SCHOOL COUNSELOR, 10 MONTHS
0487	BEHAVIORAL HEALTH COUNSELOR
0502	COMMUNITY RELATION LIAISON, FT
0503	CONFLICT RESOLUTION SPECIALIST
0507	BILINGUAL VOC SUPPORT ASST
0510	INTERP, DEAF/HARD OF HEARING
0522	STEP CASE MANAGER
0529	STEP CLINICAL SOCIAL WK CRD
0529	STEP CLINICAL COORDINATOR
0531	STEP SCHOOL BEHAVIORAL CONSULT
0536	SCHOOL PSYCHOLOGIST
0538	PROGRAM COORDINATOR
0541	SCHOOL PSYCHOLOGIST, BILINGUAL
0554	LIFEGUARD
0558	SCHOOL CLIMATE LIAISON
0597	STEP FAMILY PEER
0807	SUPPORTIVE SERVICES ASST, 4 HR
0812	CLASSROOM ASST, SP ED, HEAR IMP
0815	SUPPORTIVE SERVICES ASST, 3 HR
0816	SCHOOL COMMUNITY COORD, FT
0819	CLIMATE SUPPORT SPECIALIST
0825	CAREER & TECHNICAL EDUC ASST
0839	CLASSROOM ASST
0844	LIBRARY INSTR MTRLS ASST, FT



TITLE CODE	TITLE
0858	COUNSELING ASST, BILINGUAL
0863	ONE TO ONE ASST, SPECIAL ED
0863	SPECIAL EDUCATION ASSISTANT
0885	SCHOOL IMPROV SUPPORT LIAISON
0927	CONTRACTED IT COMP SUPPT SPEC*
0988	CONTRACTED TEACHER, SPECIAL ED*
0993	CONTRACTED SPEECH THERAPIST*
1111	SECRETARY I
1114	SECRETARY III (GENERAL)
1133	EXECUTIVE SECRETARY
1243	SCHOOL-BASED TECH MAINT ASST
1706	HEALTH ROOM TECHNICIAN
1709	OCCUP THERAPIST
1709	THERAPIST (OCCUP/PHYS)
1711	PHYSICAL THERAPIST
1712	SCHOOL NURSE
1715	SCHOOL NURSE PRACTITIONER
1817	SCHOOL CLIMATE MANAGER
1860	INSTRUCTOR, JROTC
5002	CUSTODIAL ASSISTANT
5007	BUILDING ENGINEER-GROUP I
5009	BUILDING ENGINEER-GROUP II
5011	BUILDING ENGINEER-GROUP III
5013	BUILDING ENGINEER-GROUP IV
5020	GENERAL CLEANER, 8 HOURS
6005	AGRICULTURAL MECH & STOCK CLK
6992	FARMER
7602	FOOD SVCS WORKER II



TITLE CODE	TITLE
7603	FOOD SVCS UTILITY WORKER
7605	FOOD SVCS ASSISTANT
7607	STUDENT CLIMATE STAFF, 3 HOURS
7607	NOON TIME AIDE, 3 HRS
7608	STUDENT CLIMATE STAFF, 3.5 HRS
7610	STUDENT CLIMATE STAFF, 4 HOURS
7610	NOON TIME AIDE, 4 HRS
7614	FOOD SVCS WORKER III
7619	FOOD SVCS WORKER SENIOR
7621	STUDENT CLIMATE STAFF, 5 HOURS
7621	NOON TIME AIDE, 5 HRS
7633	FOOD SVCS MANAGER I
7634	FOOD SVCS MANAGER II
7635	FOOD SVCS MANAGER III
7636	FOOD SVCS MANAGER IV
7668	STUDENT CLIMATE STAFF, 6 HOURS
8232	CUSTODIAL ASSISTANT
8233	CUSTODIAL ASSISTANT
8444	STUDENT CLIMATE STAFF, 7HR*
0230S	ASSISTANT PROGRAM COORD
0877S	PROG ASSISTANT

<sup>\*</sup>Newly added for the 2023-24 survey