The number of responses this year \( (N = 299) \) was higher than in previous years
- However, the rate (69%) was about 4-5% below the historical average
- 11% of the data were excluded due to careless responses (this percentage is consistent with research)

The inclining trend of positive responses seen in the previous 3 years was disrupted in the current year, showing a decline from last year
- In 2018-19, the 67.9% of the responses were positive, whereas the rate dropped to 65.3% in 2019-20 (decreased by 2.6%)
- As in previous years, the Trust subscale had the lowest rate of agreement

Trust subscale agreement remains the lowest of any other scale
- Principals had a notable decrease in agreement rates on the Trust subscale – regardless of length of tenure
- The 10-year dip was again noted this year, but it is still unclear if this is related to years of tenure, or if it is related to a cohort effect that will shift over time

A similar pattern of responses was noted regarding Communication, Trust, and Morale subscales, by tenure and position types
- These were combined, and suggestively created an “Affective” needs scale
- Although all Admin/PT positions showed a decline in regard to length of tenure, Principals showed the most drastic decline of any other group
  - Principals with 1-6 years of experience had the highest rate of agreement compared with any other group
  - However, Principals with 7+ years of experience had the lowest rate of agreement
- This pattern was similar to that noted within the careless responses data
  - Lowest rates of agreement / highest careless response rates were from Principals, followed by Administrators and Professional/Technical employees, with Assistant Principals having the highest rates of agreement and lowest rates of careless responses
  - It is highly suggested that further work with these groups, especially Principals, is set up in order to assuage their negative feelings related to Communication, Trust, and Morale

The results of our Admin/PT climate survey indicate that our school leaders need to feel that their voices are heard, need to feel appreciated and have stronger, mutual relationships with district leadership, and need to trust that they are influencing decisions made by the district
Introduction

Most research studies suggest that school climate is positively correlated with academic achievement – that is, aspects of school climate related to safety, teaching and learning, relationship-building capacity, and school environment have been shown to foster greater student achievement when properly cultivated (Cohen, McCabe, Michelli, & Pickeral, 2009). School climate can even be a protective factor for students with less than ideal family environments, moderating the relationship between possible negative burdens the students have and their academics (O’Malley, Voight, Renshaw, & Eklund, 2014), and although it may be perceived differently from one student to the next, climate has been argued to be “a measure of community that is thus reflected in the collective experience of students and their interactions with peers and school adults … [and] ought to be researched at the school level” (i.e., in a multi-level model research design) (Wang et al., 2014).

Research has also shown that increasing staff climate can have multiple impacts on both staff and students’ outcomes.

- Better climate has been linked to increased staff, faculty, and student performance (Freiberg, 1998)
- “Research shows that school climate can affect many areas and people within schools. Consequently, research suggests that positive interpersonal relationships and optimal learning opportunities in all demographic environments can increase school achievement levels and reduce maladaptive behaviors” (McEvoy & Welker, 2000; as cited in Tubbs & Garner, 2008, p. 18)
- Students who attend safe schools are more likely to be academically engaged and are less likely to exhibit problem behaviors such as drug use or violence. Students are less likely to drop out of safe schools (Bekuis, 1995; Bryk & Thum, 1989; Greenberg, Skidmore, & Rhodes, 2004; Osher, Dwyer, & Jimerson, 2005)
- “The organization’s climate is reflected in its structures, policies, and practices; the demographics of its membership; the attitudes and values of its members and leaders; and the quality of personal interaction” (Tubbs & Garner, 2008, p. 19)
- “Evaluation is necessarily only one step in an ongoing process of learning and school improvement” (Cohen, McCabe, Michelli, & Pickeral, 2009, p. 205)

In short, survey measurement and analysis is the beginning of a change process. The safety, challenge, support, and social-emotional learning aspects of the survey reported within this paper should be used to provide a meaningful start of a performance management strategy in APS schools.
Administration of the Survey

The questions for the Admin/PT staff survey were originally developed in 2008 with input from the School Executives Association (SEA), staff focus groups, district leadership, and the Division of Accountability and Research. The questions were designed to reflect attitudes related to clarity of vision, communication, morale, program support, trust, and work conditions. This year marked the 12th administration of the Admin/PT Climate Survey. The survey was sent to employees via email from an online survey tool (i.e., Survey Monkey), and reminders were sent weekly for three weeks leading up to winter break, with a final reminder following the break. Two new questions were added to the survey in 2017-18 regarding the APS 2020 Strategic Plan, and one question (I feel my work is aligned to the work of the district’s goals within the strategic plan APS 2020: Shaping the Future) was dropped due to overlap with another item for the current year.

Important Note:

One additional item was added to the survey this year that allowed us to evaluate the quality of an individual's responses. It has been shown that respondent interest, survey length, social contact, and environmental distractions impact the quality of survey research (Meade & Craig, 2012). In effect, a portion of survey participants typically respond to items without regard to the item content. For example, a participant might respond with "Disagree" to all of the items on this survey without reading each item. Responding without regard to the content is referred to as careless responding. In line with Meade and Craig's (2012) recommended best practices in survey research, we incorporated this additional item (i.e., For your response on this item, please select "Neutral") to gauge careless responses in 2019-20. Participants who did not respond by selecting “Neutral” on this item were removed from analyses.

Staff Characteristics

For the current school year, the number of responses was at an all-time high—with 299 employees having taken the survey. However, response rates continue to fluctuate from year to year, and although APS received the highest number of responses this year, the response rate was about 4-5% lower than our historical average. Table 1 presents the response rates from the past eight survey cycles. Of note, for 2012-13, the response rate was particularly high, and calculating the number of employees, given the 96% rate and the 215 responses, it is possible that the rate was calculated differently that year. However, from 2013-14 to the current year, the responses have, generally, fluctuated around the 73-74% average across the 7 years. Another item to note about the employee data is that there has been a steady increase in the number of Admin/PT employees over the past 8 years—a number that has doubled in this timeframe. This information is graphed in Figure 1, as well.
Table 1. **Historical Admin/PT Survey Response Rates from 2012-13 to 2019-20.**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N Responses</td>
<td>206</td>
<td>220</td>
<td>216</td>
<td>284</td>
<td>271</td>
<td>257</td>
<td>287</td>
<td>299</td>
</tr>
<tr>
<td>N Employees</td>
<td>215*</td>
<td>293*</td>
<td>332*</td>
<td>351*</td>
<td>347*</td>
<td>383*</td>
<td>390</td>
<td>435</td>
</tr>
<tr>
<td>% Response Rate</td>
<td>96%</td>
<td>75%</td>
<td>65%</td>
<td>81%</td>
<td>78%</td>
<td>67%</td>
<td>74%</td>
<td>69%</td>
</tr>
</tbody>
</table>

| Careless Responses n | 34 | 11% |
| Effective Response Rate | 61% |

*Note:* Number of employees for these years was calculated post-hoc from the number of responses and the response rate per each year.

The number and percentage of careless responses are also provided in Table 1. Because this was the first year that we have incorporated such an item, this data is only displayed for the 2019-20 school year. With 34 of the 299 survey participants having selected an item other than “Neutral” on the quality check item, the percentage of careless respondents was 11.4%. This is consistent with the 10-12% rate that Meade and Craig (2012) found in their undergraduate student sample. In effect, the data from these 34 participants was considered to have been entered without regard for the item content, and their responses were subsequently removed from the analyses in the “Survey Results” section—consequently, the effective response rate (i.e., the percentages of good responses compared to total number of Admin/PT staff members) was 61%. Interestingly, the percentage of careless responses varied depending on the position type: Principals had the highest rate of careless responses (13.5%), followed by Other Admins (11.6%), and Professional/Technical (5.4%), with Assistant Principals having the lowest careless response rate (2.2%).

In Figure 1, the top line is the number of employees per school year, and the equation estimates that there has been an increase of about 20 Admin/PT employees per year over the past 7 years. The middle line represents the number of responses, which has increased by about 13 per year. Finally, the bottom line shows the response rate, with a very slight decrease per year (less than .5%) and an average of 75.2% over the past 7 years.
Of the 299 respondents, 129 were Professional/Technical (43%), 37 Principals (12%) and 46 Assistant Principals (15%), 69 Administrators (23%), and 6% of the respondents did not indicate their position. Of note, the percent of principals who participated in the survey in 2019-20 was lower than in any other year since 2012-13. The number of ‘Null’ responses to this item has steadily decreased from 19% in 2014-15 to 3% last year, with an increase this year to 6%. In general, it seems that overall trust in relaying specific job information is still lower than it was 5 years ago, the increase of null responses on this item in the past year may be indicative of decreasing trust (or at the very least, attenuating trust). Indeed, in the “Survey Results” section, the analysis of the Trust subscale indicates a negative shift in Admin/PT employees’ trust.

The distribution of respondents regarding how many years they have been in APS was also assessed. About 10% of responses were from employees in the district in their first year, 13% from 2-3 year employees, 14% being in the district for 4-6 years, 12% for 7-10 years, 20% for 11-20 years, and 6% reported being in the district for 20 or more years. An additional 25% of employees did not report their tenure. The average tenure of respondents was about 8.5 years ($M = 8.57$ years, $SD = 6.65$), with a median of 7 years—indicating the expected skew that can be seen in Figure 2.
Survey Results

From 2016-17 to 2018-19, a declining trend of overall responses of “Strongly Disagree” or “Disagree” was noted. In 2016-17, the overall percentage of negative responses was 24.2%, which decreased to 18.2% the following year, and finally dropped to 14.4% in 2018-19. Further, the overall percentage of positive responses increased over this timeframe. In 2016-17, the percentage of positive responses was 56.0%, increasing to 62.0% the following year, and reaching 67.9% in 2018-19. However, these trends did not continue into the current year: In 2019-20, the overall percent of positive responses dropped to 65.3%, and the overall percent of negative responses increased to 16.2%. These differences are not substantial changes from last year, but they may be indicative of an overall lower staff climate than seen in previous years.

Indeed, the only subscale which had a positive change from last year was Clarity of Vision. With the exception of the Clarity of Vision subscale, all other subscales decreased from last year. There are two additional points to note from the figure below. First, although Safety subscale scores decreased over the past four school years, it still has the highest agreement percentage, compared with the rest of the subscales. Second, the agreement rates within the Trust subscale have historically fluctuated more than any other subscale.
Because the Trust subscale was continually rated the lowest out of the seven subscales, further analyses of this subscale were conducted, investigating differences regarding employees’ position and tenure. Figure 4 shows positive Trust response percentages over the past 8 years for each of the four Admin/PT positions. In general, Administrators have higher Trust subscale responses than Assistant Principals, Principals, and Professional / Technical employees over the past 4 years. Additionally, the figure below illustrates a decline in Trust subscale “Positive” responses starting in the 2013-14 school year, with a low point in 2016-17, then showing increases over the next 2 years, with decreases in Administrators and Principals for the current year. Altogether, the data in Figures 3 and 4 suggest that the direction and leadership in the district has had an overall positive impact over the past 4 school years; however, those impacts have not sustained into the current year, especially for Administrators and Principals.
Another relevant component of further investigating the *Trust* subscale is that of tenure. Because the tenure data is skewed, comprised of more employees with less tenure, a median split of this variable was used for analysis in Figure 5. Thus, Figure 5 shows the same positions as in Figure 4, but separated by whether the employees have been with APS for 1 to 6 years or for 7 or more years (and only for the past 4 years). In general, a similar pattern (as in Figure 4) emerges. However, particularly in recent years, most groups (i.e., 1-6 years and 7+ years) are generally clustered together, with the exception of Principals, who diverged depending on their tenure grouping. Principals with under 7 years of experience showed the highest positive response rate compared with any other group in 2019-20 (although it was a 13% decrease from the previous year, resulting in a positive *Trust* subscale rating of 54.2% in 2019-20). Principals with 7 or more years of experience also saw a decline in *Trust* subscale ratings (over 11% decrease; with 32.8% positive *Trust* subscale responses in 2019-20). In all, Principals with 7 or more years of experience responded less positively to *Trust* subscale items—by a factor of 21.4%—than their peers with less experience.
Figure 5. Positive responses to the Trust subscale across four school years, by position and tenure.

Figure 6 shows the differences in the two tenure groups (i.e., 1-6 years and 7+ years) across all seven Admin/PT Climate Survey subscales for the current school year. Similar to last year, with the exception of the Safety subscale, employees with more tenure had less positive responses. The subscales with the highest difference between the two tenure groups were Communication (10.1% difference), Trust (7.4% difference), and Morale (7.0% difference).

Figure 6. Difference in percentage of positive responses on the seven Climate Survey subscales for the 2019-20 school year.
Another analysis was conducted to investigate the Trust subscale more fully. Because there was a large difference between the two tenure groups regarding the percentage of positive responses on the Trust subscale items, Figure 7 removes the tenure grouping and illustrates the percentage of positive responses on the Trust subscale for each year of tenure. It should be noted that with more tenure, there are less data points (see Figure 2), so after about 20 years, columns with only one respondent were removed. The dotted lines illustrate (1) a calculated linear average and (2) a moving average of the percentage of positive responses across the years of tenure. There are a few aspects of Figure 7 that are worth mentioning.

Perhaps most significant: at around 10 years of employment, there is a noticeable ‘dip’ in Trust subscale “Positive” responses. There are two likely scenarios that are causal of this decrease in Trust subscale rates from 10 to 12 years of employment. First, it could be related to attaining 10 years of employment in the district and having a subsequent ‘slump’ in Trust subscale responses (as well as other Climate subscales) for a few years. Second, it could be related to a specific cohort of employees, and this group of employees has experienced something that is unique to them and has caused this lower rate of positive responses on the Trust subscale items. If it is the first scenario, then this dip will stay centered around 11-12 years of tenure, and if it is the second scenario, then the dip will move with the cohort in subsequent years. This is a similar pattern to what was reported last year; however, last year, the lowest part of the dip was noted to be at 11 years of tenure. It is not yet possible to state whether this dip is resultant of a moving cohort of teachers, or if it is related to years of tenure.

Figure 7. Percentage of responses marked "Agree" or "Strongly Agree" to Trust subscale items, by year of tenure.
Because the *Morale* scale showed a different pattern of results last year, with around 70% positive response rate, regardless of years of tenure, it was analyzed for the current year. Although there was less of a decline, overall, across tenure than other scales, it is still noticeably different than the reported rates from 2018-19. Thus, not only were the responses on the *Morale* scale less positive this year, compared to last, they also tended to decrease with increased tenure.

![Figure 8. Morale Subscale positive response rates by years of tenure.](image)

A final set of analyses investigated the interaction between job types and tenure (grouped by 1-6 years and 7+ years) on each of the seven subscales. In order to conserve space in this report, the seven charts have been omitted. However, for three of the subscales, a similar pattern emerged, showing decreases across the two tenure groups which diverged depending on the job type (see Figure 9).

The lines in Figure 9 follow the average score for each group, combining all of the items in the following scales: *Communication, Morale*, and *Trust*. In order to chart the responses, they were recoded as follows:

- *Strongly Disagree* was recoded as a -2
- *Disagree* was recoded as a -1
- *Neutral* was recoded as a 0
- *Agree* was recoded as a 1
- *Strongly Agree* was recoded as a 2
In effect, points that appear above 0 on the y-axis were generally more positive than negative, and vice versa. An average around 1 indicates most responses for those items were “Agree”. As can be seen in Figure 9, the average response for each of the 4 job types and tenure groups was between “Neutral” and “Agree”. Examining the chart further, Assistant Principals responded similarly, comparing tenure groups (albeit slightly lower in the 7+ Years group compared to the 1-6 Years group). Professional/Technical employees indicated a decrease of about .13 scale points, comparing the 1-6 Year and 7+ Year groups. Administrators who are not Principals had a larger difference, comparing the two tenure groups (.31 points). The greatest difference on the chart (and perhaps the one of most import), though, regards the Principals, who had an average of .83 points across these three subscales in the 1-6 Years group, but who also had a considerably lower average in the 7+ Years group (.32 points), resulting in a difference of .51 points.

Underscoring the notion that none of the groups had an average rating of the three affective scales that would indicate agreement with the items, the decrease over time in the Communication, Morale, and Trust subscales suggests that affective states of Admin/PT employees are low to begin with and worsen over time. Additionally, when one considers that Principals “are the lynchpins [who] create environments in which teachers can thrive” (Rowland, 2015; pp. 4-5), thereby facilitating student success. Further, an earlier document relaying how principals should guide their school communities used a military quote as a metaphor: “It’s people, not systems, that win and deter wars” (Trost, 1989, as cited in Deal & Peterson, 1990; p. 88). In other words, systems can be put in place within schools to improve academics, climate, and a host of
other outcomes, but without the proper leaders, the systems lack their main driving force.

**Conclusion and Recommendations**

For the current school year, the number of responses was at an all-time high—with 299 employees having taken the survey. However, the response rate of 69% was about 4-5% lower than our historical average. This was the first year that we incorporated an assessment of careless responses in the Admin/PT Climate Survey, and with 34 of the 299 survey participants having selected an item other than “Neutral” on the quality check item, the percentage of careless respondents was 11.4%. This is consistent with the 10-12% rate that Meade and Craig (2012) found in their undergraduate student sample. In turn, the effective response rate (i.e., the percentages of good responses compared to total number of Admin/PT staff members) was 61%.

There was a decrease in overall agreement, comparing this year (65.3%) to last year (67.9%), resulting in a 2.6% year-to-year dip in overall agreement. This coincides with six of the seven subscales also showing decreased agreement rates compared to last year (Clarity of Vision was the sole exception, having increased by 2.1% from last year).

Responses on the Trust subscale were further investigated by position type and tenure. Regarding position type, Principals had a notable decrease in agreement rates on the Trust subscale, comparing this year to last, and for 2019-20, Principals had the lowest agreement rate on this subscale than the other three positions. This decrease was irrespective of length of tenure – Principals with under 7 years of experience saw a 13% decrease in Trust subscale agreement and Principals with 7 or more years of experience saw an 11% decrease. Trust subscale agreement was also assessed by years of tenure, and consistent with last year, a noticeable dip was noted to occur in Trust subscale agreement between 10 and 12 years of tenure. It is still too early to assess if this is an effect related to years of tenure, or if it is a cohort effect that will move with this group of teachers over time.

A final set of analyses focused on the “Affective” scales (i.e., Communication, Morale, and Trust), differentiating groups by position and years of tenure (2 groups: 1-6 years and 7+ years). Of note, although all positions showed a decrease in the overall “Affective” scale means, Assistant Principals saw the least change across years of tenure and Principals saw the most decline, with Administrators and Professional/Technical positions showing moderate decline. Additionally, it should be noted that Principals with 1-6 years of experience showed the highest rates of agreement, but Principals with 7 or more years of experience showed the lowest rates of agreement.

Interestingly, the pattern of agreement on the Affective scales (especially in regard to the 7+ years grouping) corresponds to the pattern of careless responses for those same positions. The percentage of careless responses also varied depending on
the position type: Principals had the highest rate of careless responses (13.5%), followed by Other Admins (11.6%), and Professional/Technical (5.4%), with Assistant Principals having the lowest careless response rate (2.2%). Thus, not only are the staff members reporting differential rates of Communication, Trust, and Morale as they relate to subscale agreement, those same groups whose data was not included in the analyses due to careless responding showed a similar pattern, albeit with disengagement. It is highly suggested that further work with these groups, especially Principals, is set up in order to assuage their negative feelings related to Communication, Trust, and Morale.

In Aurora Public Schools, we have highly effective leaders who are directing academic systems, and we have challenging goals that we are working toward. The results of our Admin/PT climate survey indicate that our school leaders need to feel that their voices are heard, need to feel appreciated and have stronger, mutual relationships with district leadership, and need to trust that they are influencing decisions made by the district. Focusing on the affective needs of our Principals (as well as other staff members), especially as they relate to Communication, Morale, and Trust, should be consequential in improving our academic systems and outcomes toward our goals.
References


