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Austin Independent School District

Campus Best Practices Overview

Academic Gains and Improvement

Introduction

Austin Independent School District (AISD) measures students' growth in a variety of ways. A significant indicator of students' academic progress used by state and local officials is the State of Texas Assessment of Academic Readiness (STAAR) test results. While reviewing longitudinal STAAR results, one board member noted that some schools made significant improvements in the overall passing rates of their students in just a single year, and inquired about how that was accomplished. Specifically, were structural changes made that contributed to growth in STAAR passing rates at certain campuses and not at others? This evaluation seeks to determine what tools, practices, or other factors may have contributed to changes in AISD elementary campus performance between the 2017–2018 and 2018–2019 school years.

Using student-level factors, curriculum and programming indicators, and campus features (e.g., staff retention and support programs) as inputs, the results indicate that changes in campus and teacher leadership scores are important and significant predictors of improvements in campus performance, but data modeling alone does not offer enough information. The most significant indicators in statistical modeling are simply not enough to explain why some elementary campuses showed greater performance improvements year to year, but qualitative information may provide more insight.

Research Design and Framework

AISD uses the Effective Schools Framework (ESF) for improvement and performance monitoring of both campuses that are required to have an improvement plan and those whose leaders volunteer because they feel their campus would benefit from the ESF to guide their improvement plan. The ESF identifies five main levers that support the diagnostic process and implementation of campus improvement plans. The five levers provide the organizational framework for identifying factors that may contribute to high performance at a campus. As such, we believed that identifying changes in the ESF levers that corresponded to changes in campus performance would provide insight into how large improvements in campus performance were achieved at some campuses.

Quantitative Design and Analysis

The evaluation used linear regression modeling to determine which, if any, ESF levers were related to performance change over time.

Outcome Measure: Campus Performance

Because campus performance incorporates more than STAAR results alone, campus performance was measured using an overall composite score created by the AISD Department of Campus and District Accountability. To determine the overall performance score for each campus, the department used several measures, including attendance rate; state accountability domain scores; iStation Indicators of Progress (ISIP) grade-level measures; selected

Effective School Framework Levers[1]

STRONG SCHOOL LEADERSHIP AND PLANNING

Effective campus instructional leaders with clear roles and responsibilities develop, implement, and monitor focused improvement plans that address the causes of low performance.

EFFECTIVE, WELL-SUPPORTED TEACHERS

Campus leadership retains effective, well-supported teachers by strategically recruiting, selecting, assigning, and building the capacity of teachers so that all students have access to high-quality educators.

POSITIVE SCHOOL CULTURE

Positive school culture requires compelling and aligned vision, mission, goals and values, explicit behavioral expectations and management system, proactive and responsive student support services, and involved families and community.

HIGH-QUALITY CURRICULUM

All students have access to a TEKS-aligned, guaranteed and viable curriculum, assessments, and resources to engage in learning at appropriate levels of rigor.

EFFECTIVE INSTRUCTION

All students have rigorous learning experiences because the school ensures objective-driven daily lessons, classroom routines, and formative assessments that yield the data necessary for teachers to reflect, adjust, and deliver instruction that meets the needs of each student.

[1] Texas Education Agency. *Essential Schools Framework: The Framework*. Retrieved September 1, 2020, from https://texasesf.org/framework/

Teaching, Empowering, Leading and Learning (TELL) Survey component responses; and social emotional learning (SEL) scores. Year-to-year change in performance was determined using the difference between 2017–2018 and 2018–2019 overall scores.

Table 1.

Components of the Campus Performance Scores

State accountability	TELL survey component	Other input
Domain 1	Managing student conduct	Attendance
Domain 2A	General climate	LAS domain 1 and 2 (used in 2017–2018)
Domain 2B	Principal leadership	ISIP % on grade level (used in 2018–2019)
Domain 3		2017–2018 SEL (used in 2018–2019

Note. For more information on state accountability domains and local accountability systems (LAS), see https://tea.texas.gov/texas-schools/accountability/academic-accountability/performance-reporting

Input Measures: ESF Levers

The five-lever ESF was the basis for the quantitative analysis, using internally available data to model each lever's actions and practices. Some components of the TELL Survey that were not included in the campus performance score (i.e., the output measure) were included as lever components (i.e., input measures), as seen in Table 1. Year-to-year change scores (i.e., the difference between 2018–2019 and 2017–2018 scores) were calculated for each lever. Other student and staff data, used in the analysis as control variables due to their possible contributions to campus performance, were data points from the 2018–2019 school year.

Table 2.

Data Sources Used to Model the Levers

Lever	Selected TELL survey components	Other measures
Lever 1: strong school leadership and planning	District vision School leadership District leadership	Administrative change
Lever 2: effective, well-supported teachers	Professional development opportunities Facilities and resources Teacher leadership	Teacher retention
Lever 3: positive school culture	Community support and engagement Achievement press	SEL implementation score change AISD Student Climate Survey change AISD Parent Survey response rate
Lever 4: high-quality curriculum	Instructional practice and support	
Lever 5: effective instruction	Teacher data use Teacher PLCs	
Other		Student-level demographic measures Average years of AISD experience (staff) Average years of work experience (staff) Advanced degrees held (Staff)

Leadership Quartiles

Quartiles are values that equally divide data into quarters: the lowest, next lowest, second highest, and highest groups.

Each quartile contains 25% of the total observations. Generally, the data are arranged from smallest to largest. In our case:

- **First quartile: the group of campuses with the lowest 25% of leadership scores**
- **Second quartile: the group of campuses whose leadership scores landed between the 25.1 and 50th percentiles**
- **Third quartile: the group of campuses whose leadership scores landed between the 51st and 75th percentile**
- **Fourth quartile: the group of campuses with the highest 25% of leadership scores**

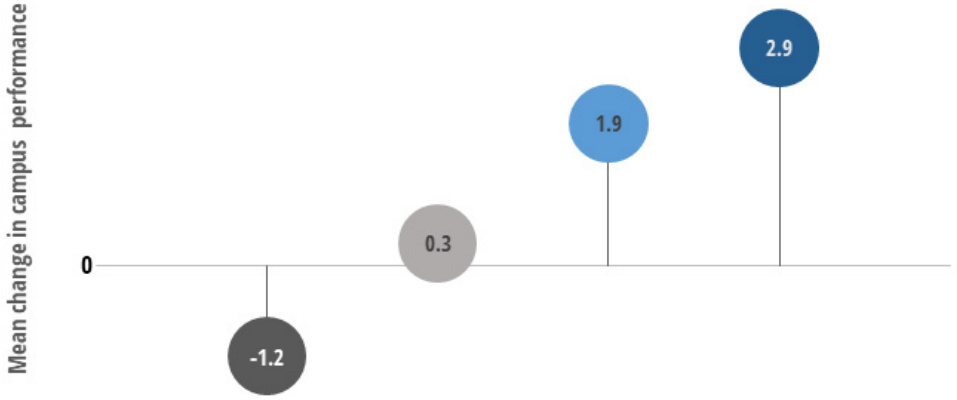
Quantitative Results

The components of each lever were standardized and averaged together to provide lever scores. Each lever was used in a regression model as a predictor of campus performance. Initial analysis included student demographics and staff experience indicators (e.g., work experience and advanced degrees held) as control variables in the model. Interestingly, although student demographics predicted performance in a single year, neither student demographics nor staff experience significantly predicted whether a school's performance score changed over time (in this case, between 2017–2018 and 2018–2019), and were therefore removed from modeling.

Overall, only improvements in the leadership composite variable (Lever 1) was consistently significantly related to positive overall growth in campus performance. For example, the greater the increase in frequency of teachers' and administrators' agreement with statements regarding a "clear vision" or "clear goals" for the campus and district, the greater the schools' year-to-year improvement in campus performance. Improvement in leadership was the only significant predictor of improvement in campus performance; greater positive leadership change scores were associated with bigger increases in campus performance. Figure 1 highlights the relationship between changes in leadership scores and changes in campus performance. On average, schools that declined in leadership score also declined in campus performance, and schools with the greatest campus leadership change scores also showed the greatest improvement in campus performance.

Figure 1.

Campuses with very high leadership change scores showed improvements in campus performance, while campuses with very low leadership change scores actually had declined campus performance. Campuses with mid-high and mid-low leadership change fell in-between the performance change scores, as expected.



Note. Campuses were grouped into four quartiles, based on their composite leadership change scores. The performance change scores in this figure represent the average performance change scores (between 2018–2019 and 2017–2018) of the campuses in each quartile.

However, while leadership was significant, it did not account for all of the campuses with the greatest overall campus performance improvement. For example, Sunset Valley had a

high campus performance score change but ranked in the lowest leadership quartile (Table 3). Pillow Elementary also had a high campus performance change score, but its leadership quartile rank was 2 (i.e., low), and the ranks of all its other levers were also low or very low. Something else must also be contributing to the improvements in campus performance.

Table 3.
The campuses with the highest overall change did not always rank highest in lever quartiles or have the greatest sum of quartile lever rankings, further indicating the greatest growth at campuses was achieved in many ways

Campus	Quartile rank of ESF lever						
	Campus performance change	Leadership and planning	Supported teachers	Positive school culture	High-quality curriculum	Effective instruction	Sum of quartile ranks
Summitt Elementary	13	4	4	4	4	3	19
Rodriguez Elementary	10	3	4	4	4	4	19
Widen Elementary	9	4	4	4	4	3	19
Sunset Valley Elementary	9	1	4	3	3	2	13
Casis Elementary	8	4	3	3	3	2	15
Pillow Elementary	8	2	1	1	1	2	7
Casey Elementary	7	4	4	4	4	4	20
Hart Elementary	7	2	1	3	2	1	9
Reilly Elementary	6	3	3	3	4	1	14
Wooldridge Elementary	6	3	3	1	4	3	14
Guerrero-Thompson Elementary	5	4	4	4	3	4	19
Davis Elementary	5	3	4	4	4	4	19
Pickle Elementary	5	4	2	4	4	4	18
Hill Elementary	5	4	2	3	3	2	14
Doss Elementary	5	3	3	2	2	4	14
Zilker Elementary	5	1	2	3	3	4	13
Houston Elementary	5	2	3	3	1	2	11
Becker Elementary	5	3	1	3	2	1	10
Kocurek Elementary	5	2	3	1	2	2	10
Oak Springs Elementary	5	4	1	1	1	1	8

Note. While all elementary campuses were included in the analysis, only the top quartile in campus performance (i.e., those with the greatest increases in performance between 2017–2018 and 2018–2019) are shown in this table. Quartile ranks are presented for each lever: 1 = very low, 2 = low, 3 = high, 4 = very high; the higher the sum of quartile ranks, the better a campus scores across all levers, relative to other campuses

Summary of Findings

This study found that improvements in leadership scores were positively related to improvement in campus performance between 2017–2018 and 2018–2019. Leadership and human factors are important and significant. District communication should represent consistent mission and vision messaging across campuses, given this relationship between leadership and greater campus performance improvement scores. This suggests that continued investment in the district's leadership development program is warranted. However, the district may consider evaluating its principal and teacher leadership professional development practices to ensure the best use of its professional development budgets to capitalize on these opportunities. Providing recognition for schools with strong teacher leadership and campus administration may also lead to an increased sense of ownership and pride

among staff and campus-level leaders (Andrews, 2011; Postma, 2019; Wiscombe 2002).

However, this study indicated that quantitative data alone cannot provide a complete understanding of what schools are doing to improve academic attainment and student growth (campus performance). For example, some schools that scored poorly across all measured levers still showed improved performance. We looked at demographics as one possible contributor. We found that elementary schools that experienced high levels of campus performance improvement from 2017–2018 to 2018–2019 varied in their demographic representation (e.g., low socioeconomic status, special education) as well as their geographic location.

While leadership is important, we still do not have a complete understanding of how campus performance improves over time. What are strong campus leaders doing to move the needle? What other yet-unmeasured variables contribute to positive change in performance? Initially, we planned to interview campus principals as part of this study. Due to mandatory school building closures and increased demands on campus administrators in the wake of the COVID-19 pandemic, conducting interviews with over-taxed administrators and campus leaders was impractical. This work should be resumed in the future to better our understanding of the mechanics of performance improvement and of the actual work taking place in schools.

References

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