

# Positive Behavioral Interventions and Supports (PBIS): Status Update for 2019-2020



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## BACKGROUND

Positive Behavioral Interventions and Supports (PBIS) is an implementation framework that facilitates the selection and use of evidence-based practices and interventions within a tiered system of support. Specifically, PBIS offers a framework to support students academically, socially, emotionally, and behaviorally through universal practices for all students (Tier I), targeted practices for students in need of additional support (Tier II), and practices for individual students who are not fully supported by Tier I or Tier II supports (Tier III). According to the National Technical Assistance Center on PBIS, the “broad purpose of PBIS is to improve the effectiveness, efficiency and equity of schools.” Rather than requiring that specific interventions be implemented, PBIS provides suggestions for elements to consider when making decisions regarding interventions and practices as well as general procedures and practices across the tiered system of support. The implementation of PBIS in Virginia Beach City Public Schools (VBCPS) is overseen by the Office of Student Support Services. A division implementation team (DIT) consists of staff from Student Support Services, Professional Growth and Innovation, Student Leadership, School Counseling Services, Programs for Exceptional Children, Teaching and Learning, Family and Community Engagement, and Research and Evaluation.

The School Board approved PBIS for an evaluation readiness report September 11, 2018. The recommendation from the evaluation readiness report was that PBIS undergo a three-year evaluation with a focus on Tier I PBIS implementation and outcomes in 2019-2020 and 2020-2021 and a focus on implementation and outcomes of PBIS Advanced Tiers in 2021-2022. The recommendation was presented to the School Board September 10, 2019 and was approved September 24, 2019. The year-one evaluation of Tier I began in 2019-2020, but due to the COVID-19 pandemic and resulting school closure in March 2020, data collection was unable to be completed, and the year-one evaluation was postponed to 2020-2021 with the other two years of the evaluation also adjusted accordingly. Specifically, the school closure impacted the completion of the Tiered Fidelity Inventory (TFI) for 24 percent of the schools including one-half of the high school sites. In addition, academic and behavioral data were not available for the full school year, and the surveys that were planned to assess stakeholders’ perceptions and progress toward PBIS goals were not administered. Although the evaluation was postponed, the Office of Research and Evaluation developed this status update to provide stakeholders a brief summary of information regarding the VBCPS PBIS implementation plan, the implementation of PBIS within the context of the school closure, student characteristics in PBIS schools, the Division Capacity Assessment (DCA), and available school TFI data for 2019-2020. The TFI results are provided for schools that had complete data from 2019-2020 as well as for schools that had TFI data for two years to examine change in performance (both 2018-2019 and 2019-2020).

## PBIS IMPLEMENTATION PLAN AND STATUS

VBCPS has been involved in PBIS practices in a variety of capacities since the 2012-2013 school year although the models guiding implementation have varied and schools’ participation in the various models of implementation has varied. During the 2012-2013 school year, the division began participating in an initiative through the Virginia Department of Education (VDOE) called Virginia Tiered Systems of Support (VTSS), which provides support at the division level through grant funding and technical assistance. VBCPS also participated in the Multi-Tiered Systems of Support – Behavior (MTSS-B) study from 2015-2016 through 2016-2017, which provided funding for school-based coaching support and professional development for school-level coaches. Beginning in 2017-2018, the current VBCPS model of implementing PBIS began, which involved embedded PBIS school-level coaching. Every VBCPS school that implements PBIS is assigned one of the five divisionwide PBIS coaches (one of which is also a PBIS specialist).

Schools were assigned to cohorts based on the various models of implementation over the years as well as the schools’ needs according to discipline data, school climate surveys, and input from the Department of School Leadership. Schools that were determined to be most in need were assigned to cohorts scheduled to implement PBIS Tier I practices earlier than other schools. Table 1 summarizes the number of schools in each cohort including the implementation year and the

model of implementation. As of 2019-2020, all schools had implemented PBIS Tier I practices, and 34 schools in Cohorts 1, 2, and 3 received training for PBIS Advanced Tiers and had begun implementation of Tier II practices.

**Table 1: PBIS Cohorts**

PBIS Cohort	Number of Schools	Implementation Year(s)	Initial Implementation Model
<b>Cohort 1</b>	6 elementary schools	2015-2016	MTSS-B
<b>Cohort 2</b>	14 schools (4 elementary, 6 middle, 4 high)	2012-2013, 2014-2015, or 2015-2016	Some state support
<b>Cohort 3</b>	19 schools (16 elementary, 3 middle)	2017-2018	VBCPS coaching model
<b>Cohort 4</b>	21 schools (17 elementary, 4 middle)	2018-2019	VBCPS coaching model
<b>Cohort 5</b>	23 schools (12 elementary, 3 middle, 8 high)	2019-2020	VBCPS coaching model

Note: For Cohort 2, Renaissance Academy middle school and Renaissance Academy high school are considered as two separate sites because they each received their own TFI scores. Green Run High School and Green Run Collegiate are considered one site because the campus as a whole received one TFI score. For Cohort 5, Old Donation School is considered one site at the middle school level.

## IMPACT OF SCHOOL CLOSURE

During the school closure as schools moved to online learning for students, PBIS coaches offered support to schools by focusing on identifying, developing, and sharing resources. A weekly PBIS Coaching Connection electronic newsletter was created as the primary method of providing PBIS-related resources to schools. In addition, a PBIS Google site housed various resources, including resources to support social emotional learning (SEL) in the virtual setting and addressing mental health; weekly information distributed by the PBIS coaches that included ideas, activities, links to websites, and professional articles; and videos created by the PBIS coaches that explained how PBIS practices could be applied to support learning at home. In addition, the PBIS coaches provided support to schools through virtual meetings with school PBIS teams and administrators as requested and assisted with professional learning sessions offered during the school closure. Webinars were created to build the capacity of staff with implementing culturally responsive practices and applying PBIS to the virtual environment. A Schoology course was also developed to provide teachers and school leaders in-depth training on classroom practices that support SEL and enhance the learning experiences of students in both the face-to-face and virtual classroom settings.

## STUDENT CHARACTERISTICS IN PBIS SCHOOLS

Student demographic data were analyzed by the schools' PBIS cohort. As shown in Table 2, schools that began PBIS implementation as part of earlier cohorts (e.g., Cohort 1, 2, or 3) had higher percentages of African American students, higher percentages of free or reduced priced meal students, and lower percentages of Caucasian students.

**Table 2: 2019-2020 Student Demographic Characteristics Based on PBIS Implementation Cohort**

Student Characteristics	Cohort 1 N=2,861 6 sites (6 ES)	Cohort 2 N=12,591 14 sites (4 ES, 6 MS, 4 HS)	Cohort 3 N=12,162 19 sites (16 ES, 3 MS, 0 HS)	Cohort 4 N=14,005 21 sites (17 ES, 4 MS, 0 HS)	Cohort 5 N=25,006 23 sites (12 ES, 3 MS, 8 HS)
<b>Gender</b>					
Female	48%	49%	49%	48%	49%
Male	52%	51%	51%	52%	51%
<b>Ethnicity</b>					
African American	22%	31%	29%	18%	19%
Caucasian	46%	41%	39%	52%	53%
Hispanic	13%	13%	14%	12%	11%
Asian	6%	4%	6%	6%	7%
Multiracial	11%	9%	11%	10%	9%
<b>Economically Disadvantaged</b>	46%	46%	50%	39%	31%
<b>Special Education</b>	12%	12%	11%	11%	10%
<b>Gifted</b>	8%	14%	10%	12%	21%

Note: American Indian and Native Hawaiian/Pacific Islander groups were less than 1 percent of the school populations and are not included in the table.

## PBIS IMPLEMENTATION FIDELITY DATA

Two measures are used to assess the fidelity of PBIS implementation in VBCPS, one at the division level and one at the school level. The division-level assessment is the District Capacity Assessment (DCA), and the school-level assessment is the Tiered Fidelity Inventory (TFI).

### District Capacity Assessment (DCA)

The DCA measures implementation fidelity across the division and is completed once a year in the spring by the PBIS DIT members who discuss each item and come to consensus on the final score for each item. Virginia Department of Education representatives overseeing the VTSS initiative facilitate the scoring session and answer any questions about the rubric. The DCA has a scoring rubric that documents if the division has ensured all necessary policies, procedures, and documentation are in place to support a successful implementation of PBIS and results of the DCA identify actions for the upcoming year.

The 2020 DCA was completed in May. Based on VBCPS internal scoring, the division's overall score was 81 percent, suggesting that many of the conditions are in place within the division for building capacity to effectively implement PBIS. This was an improvement from the 2019 DCA overall score of 73 percent. Improvements on the DCA were made in the following areas from 2019 to 2020: the DIT included an individual with executive leadership authority; the DIT had an implementation plan for PBIS/VTSS; the division used a communication plan; and the DIT secured training in PBIS/VTSS for all division/school personnel.

### Tiered Fidelity Inventory (TFI)

The TFI measures each school's implementation fidelity. In VBCPS, the TFI is completed annually by a school team along with a VBCPS PBIS coach based on observations of schoolwide and classroom practices and discussions regarding each of the TFI items. The instrument provides a description of each item that is to be rated, possible sources of data that the team may consult for determining a rating, and scoring criteria for determining the appropriate rating. Each PBIS item is scored on a three-point scale where 0 indicates the feature is not implemented, 1 indicates the feature is being partially implemented, and 2 indicates the feature is being fully implemented. The TFI for Tier I: Universal Schoolwide PBIS Features includes three subscales with multiple items or "features" including the Teams Subscale (2 items), Implementation Subscale (9 items), and Evaluation Subscale (4 items). In addition to individual item scores and subscale scores, the instrument provides an overall fidelity score. During 2019-2020, 76 percent of the schools completed the TFI for Tier I practices prior to the school closure. For the purposes of the PBIS evaluation as well as this status update, schools are categorized based on their overall TFI fidelity scores as shown in Table 4.

**Table 3: Level of Fidelity Categorization Based on Overall TFI Score**

Level of Fidelity Categorization	Overall TFI Implementation Score Percentage
High Fidelity	80%-100%
Adequate Fidelity	70%-79%
Partial Fidelity	69% or below

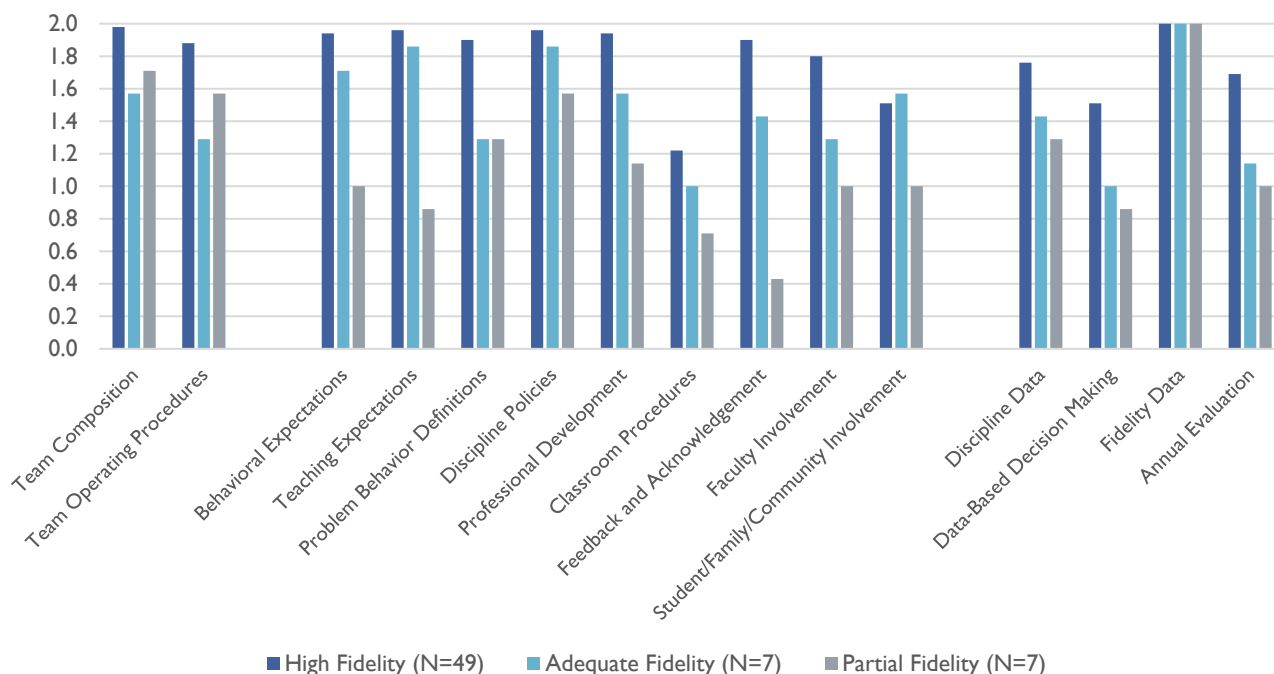
### Implementation Fidelity in 2019-2020

Implementation fidelity scores on each individual item and for the subscales of the TFI were analyzed for 2019-2020 based on the school's overall fidelity categorization (i.e., High, Adequate, Partial). Due to the school closure because of the COVID-19 pandemic, not all schools were able to complete the TFI process, but scores were available for 76 percent of schools. High schools were the most impacted school level with TFI scores not available for 6 of the 12 sites (50%). Overall in 2019-2020, 78 percent of schools were in the "high fidelity" category, 11 percent were in the "adequate fidelity" category, and 11 percent were in the "partial fidelity" category.

Figure 1 shows the TFI item average scores organized by the Teams items (2), the Implementation items (9), and the Evaluation items (4). For the majority of TFI items (67%), schools categorized as being "high fidelity" schools had the highest average item scores followed by schools categorized as having "adequate fidelity" and then "partial fidelity." One exception was for the Teams subscale items focused on Team Composition and Team Operating Procedures. For these two items, the "partial fidelity" schools had higher average scores than the "adequate fidelity" schools. In addition,

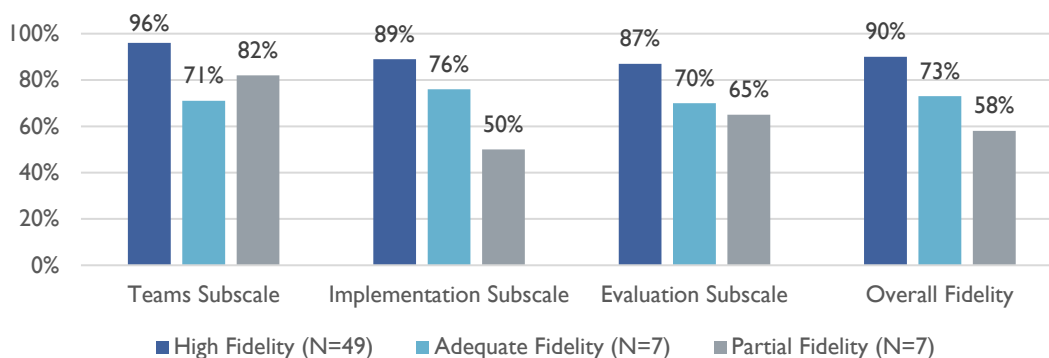
“adequate fidelity” schools had a slightly higher average score for the Student/Family/Community Involvement item compared to the “high fidelity” schools. These findings suggest that additional examination of these rubric areas may be needed to reflect on the reasons higher fidelity schools scored somewhat lower on these TFI items.

**Figure 1: 2019-2020 TFI Average Item Scores by Overall Level of PBIS Implementation Fidelity Level**



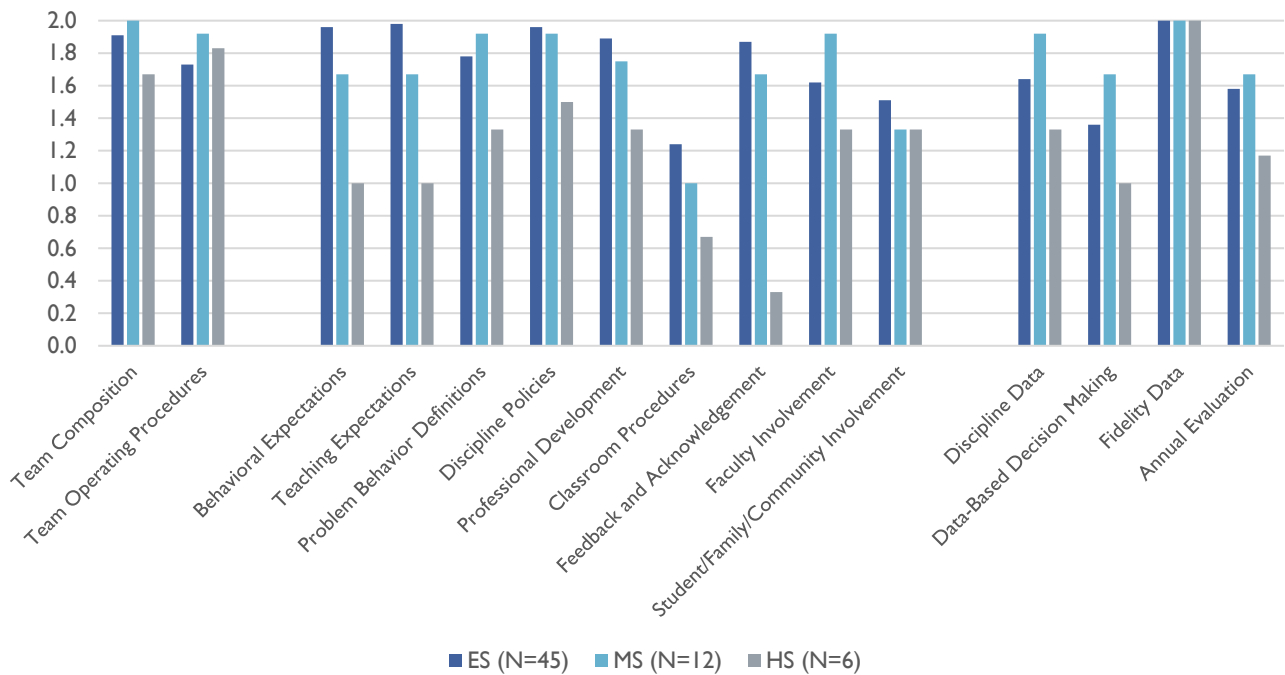
The average TFI subscale score percentages in 2019-2020 were examined by the schools’ level of fidelity. As would be expected based on the schools’ overall fidelity categorization, there were clear differences on the Implementation and Evaluation subscales between the three groups of schools as well as their overall fidelity scores (see Figure 2).

**Figure 2: 2019-2020 Average Scores on TFI Subscales and Overall by PBIS Implementation Fidelity Level**



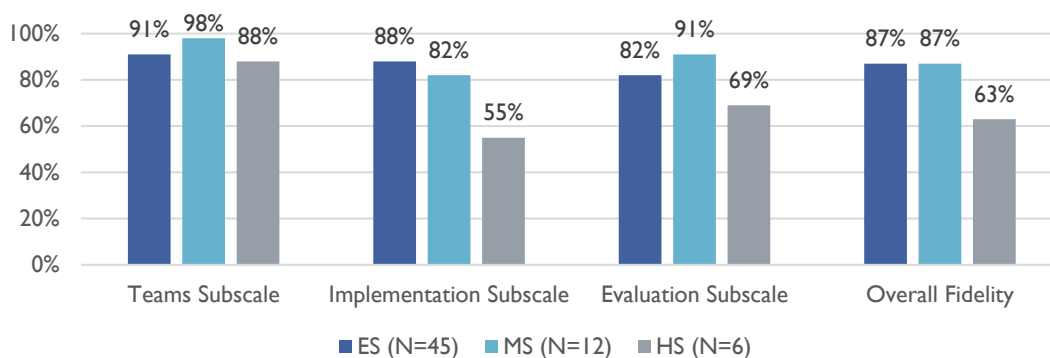
Implementation fidelity scores on the TFI were also analyzed by school level for those schools with available data. For 7 of the 15 items assessed on the TFI, the pattern of results showed highest levels of implementation fidelity at the elementary school level, and for 7 other items, the highest implementation fidelity level was found at the middle school level (see Figure 3).

**Figure 3: 2019-2020 TFI Average Item Scores by School Level**



Overall implementation fidelity results from 2019-2020 for those schools with results showed that elementary and middle schools were implementing PBIS with the highest degree of fidelity (see Figure 4). This pattern was likely related to a school's experience with implementation as three of the six high schools that had TFI scores in 2019-2020 were in their first year of PBIS implementation.

**Figure 4: 2019-2020 Average Scores on TFI Subscales and Overall by School Level**



### Change in Implementation Fidelity from 2018-2019 to 2019-2020

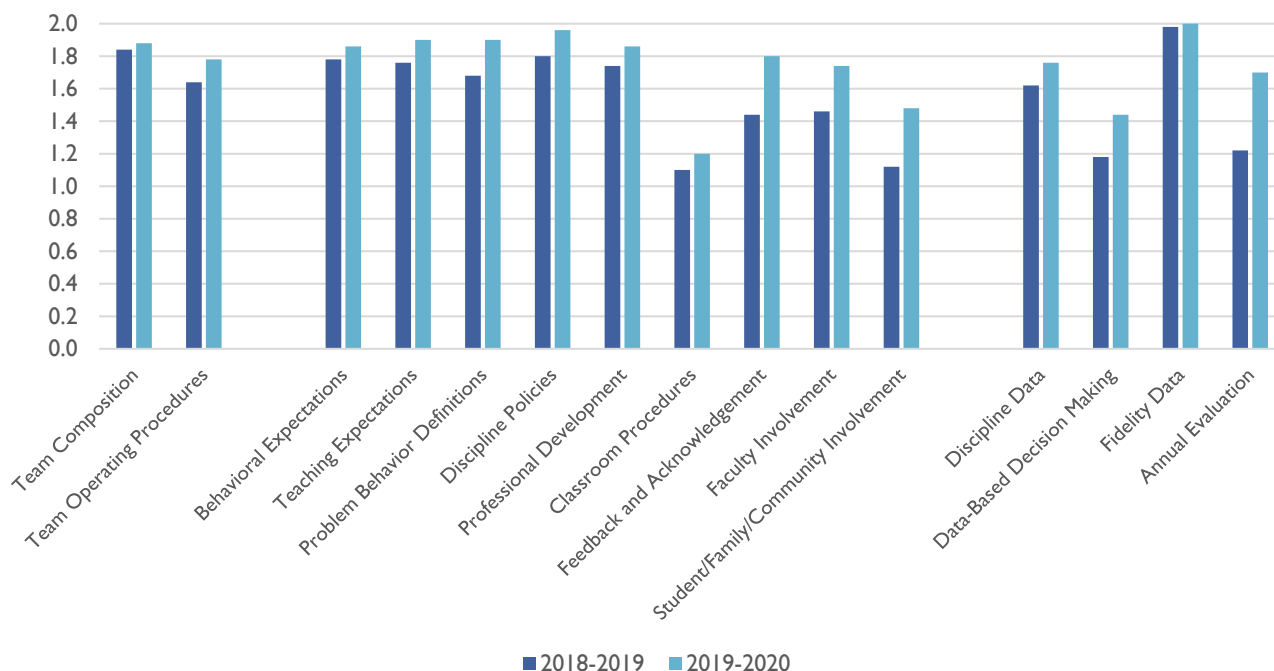
A total of 50 schools had TFI data regarding their Tier I PBIS implementation in both 2018-2019 and 2019-2020, including 36 elementary schools, 11 middle schools, and 3 high schools.<sup>1</sup> Of the 50 schools that had TFI data from both years, 78 percent of schools demonstrated an increase in their overall TFI fidelity score. The percentage of schools with an increased TFI fidelity score in 2019-2020 varied by school level with the highest percentage at middle schools where 91 percent showed improvement (78% at elementary schools and 33 percent at high schools).

When examining the change in fidelity scores for each TFI item, there was improved implementation fidelity for every item on the TFI (see Figure 5). Based on the individual item results, average Classroom Procedures scores were lower than other TFI items in both years. Classroom Procedures is focused on Tier I features being implemented within

<sup>1</sup> Data for Renaissance Academy were analyzed separately for middle school and for high school because both levels had separate TFI scores that varied. Green Run Collegiate and Green Run High School received TFI scores for the overall campus and is considered one site.

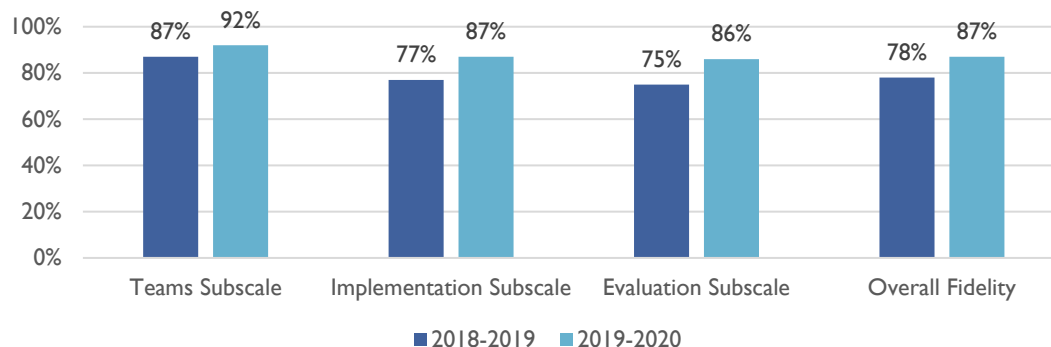
classrooms and consistency with schoolwide systems. To be fully implemented, classrooms must be formally implementing all core Tier I features, consistent with schoolwide expectations.

**Figure 5: TFI Average Item Scores for Schools With Two Years of PBIS Fidelity Data**



On the TFI subscales, data demonstrated that schools showed improvements in their PBIS implementation fidelity for each subscale and overall from 2018-2019 to 2019-2020 (see Figure 6). Additional data analyses indicated that schools at each level showed improvements in their overall fidelity percentages from 2018-2019 to 2019-2020, with the largest improvement at the middle school level. Elementary schools showed an improvement of 9 percentage points in 2019-2020 and had an overall fidelity percentage of 89 percent. Middle schools improved 16 percentage points to earn an overall fidelity percentage of 89 percent in 2019-2020. Finally, high schools showed an improvement of 4 percentage points to reach an overall fidelity percentage of 68 percent in 2019-2020.

**Figure 6: Average Scores on TFI Subscales and Overall for Schools With Two Years of PBIS Fidelity Data**



## NEXT STEPS

The School Board approved the 2020-2021 Program Evaluation Schedule September 9, 2020, which included PBIS. During 2020-2021, the evaluation of PBIS Tier I practices and outcomes is planned to include a review of the initiative's components, characteristics of students, progress toward meeting implementation and outcome goals and objectives, stakeholders' perceptions, and additional cost. The context of the COVID-19 pandemic will be considered as the academic and behavioral data and stakeholder perceptions obtained through surveys are collected and analyzed as part of the 2020-2021 evaluation.

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