

Literacy and Learning Centers: Cohort 3 (2019-20) Evaluation

Key Findings

- SDP renovated 128 PK-3 classrooms at ten schools in the summer of 2019. Work in the classrooms included physical renovations, new furniture, and new materials and resources.
- Teachers attended an average of 31 hours of PD during the 2019-20 school year.
- All teachers who responded to the survey used centers daily during the literacy block. However, teachers said using new technology was a challenge and would have liked more input into the renovations.
- Students' National Percentile Rank on AIMSweb increased from fall to winter across all grades.

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May 2021

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Why this Evaluation?

The School District of Philadelphia (SDP) redesigned 128 pre-kindergarten to third-grade classrooms into interactive learning environments. Physical renovations and classroom set-ups were completed by the end of summer 2019. Teachers received professional development sessions on incorporating the new equipment (and related topics) and access to sample units and lesson plans for using centers throughout the 2019-20 school year. Program staff at SDP identified ten schools to receive renovations in all of their PK-3 classrooms: Bache-Martin, Bryant, Dunbar, Edmonds, Emlen, Ethel Allen, Mitchell, Morris, Munoz-Marin, and Potter-Thomas.

These renovations and activities built upon the District-wide Early Literacy Strategy, which included implementation of the Balanced Literacy Framework, a weeklong Summer Literacy Institute, and a full-time Early Literacy Specialist (ELS) in every school. The Literacy and Learning Centers project was designed to be an extension of the Early Literacy Initiative and to provide teachers with the opportunity to integrate high-quality literacy instruction in a renovated, interactive learning environment.

What We Examined

Research questions

This evaluation examined four primary questions over the 2019-20 school year:

- 1) To what extent have the renovations and professional development been implemented as intended?
 - a. Which classrooms were renovated?
 - b. Who benefited from the renovations?
 - c. Who participated in professional development?
- 2) To what extent are classroom teachers satisfied with the renovations and professional development?
- 3) How do teachers perceive changes to their instructional practices and student outcomes associated with the project?
- 4) Did students in the renovated classrooms show growth in literacy rates? If so, to what degree?

Data collection and analysis

Three sources of data were collected or reviewed to answer the research questions: District administrative data, teacher surveys, and student AIMSweb (reading level) data. This section describes each data source and how the data were analyzed to address the research questions.

District administrative data

We used administrative data to answer Research Question 1, including records of classroom renovations, student demographic data at schools receiving renovations, and professional development records (list of attendees for each session and satisfaction survey data).

Teacher survey

Teacher survey data were used to answer Research Questions 2 and 3. Descriptive statistics are presented for survey data, and open-ended items were analyzed for common themes. ORE administered a survey in January and February 2020 to assess satisfaction with program supports, satisfaction with the renovations/new materials, and teacher perceptions of program influence on instruction and student/teacher interactions. Twenty-seven teachers responded for a 23% response rate.

AimswEBPlus

SDP uses aimswEBPlus, a universal early literacy screening, benchmarking, and progress-monitoring tool from Pearson, to assess literacy proficiency for all K-5 students. Teachers score students' performance on each aimswEBPlus assessment according to the number of cues students identify correctly or incorrectly in a 60-second period. Each grade level is administered one core assessment (in addition to other required measures) at three time points across the year (fall, winter, and spring):

- Kindergarten; **Letter Naming Fluency (LNF) assessment:** Measures letter identification
- 1st Grade; **Nonsense Word Fluency (NWF) assessment:** Measures phonemic awareness
- 2nd Grade; **Oral Reading Fluency¹ (ORF):** Measures oral reading fluency
- 3rd Grade; **Oral Reading Fluency (ORF):** Measures oral reading fluency

For each core assessment, ORE examined the descriptive outcomes of students on the following data points for Research Question 4:

- **Number Correct (NC):** The number of cues correctly identified during the timed test.

¹ Previously named Reading - Curriculum Based Measurement (R-CBM)

- **National Percentile Rank (NPR):** A norm-referenced measure that compares students’ number of correct responses to a national sample of students.
- **Rate of Improvement (ROI):** The number of points a student or group of students increased per week between assessment periods [i.e., (winter correct-fall correct)/number of weeks].
- **Student Growth Percentile (SGP):** SGP analyzes the rate of students’ growth compared to a nationally normed sample of students who had a similar fall performance. Percentile norms (*well below average, below average, average, above average, well above average*) that indicate the percentage of students in the nationally representative sample with similar baseline scores.

Table 1. Number of students included in the aimswebPlus analysis

Grade Level	aimswebPlus Assessment	Number of Students
K	LNF	436
1st	NWF	482
2nd	ORF	463
3rd	ORF	484
Total		1,865

In 2019-20, due to the COVID-19 pandemic and the transition to digital learning in the spring, K-5 teachers did not have access to aimswebPlus testing materials or their typical testing environment, so they did not administer the spring aimswebPlus assessments to students. Therefore, the Office of Research and Evaluation (ORE) analyzed student literacy performance between the fall and winter assessment periods of the aimswebPlus assessment for 2019-20.

What We Found

Research Question #1: To what extent have the renovations and professional development been implemented as intended?

SDP renovated 128 classrooms.

SDP used internal funds to renovate 128 PK-3 classrooms at ten schools in the summer of 2019 (Table 2). Work in the classrooms included physical renovations, new furniture, and new materials and resources. Examples of renovations included painting, updated electrical fixtures, and new flooring. New furniture included new chairs and desks for students, new bookshelves and other storage, and new centers. Centers varied by grade level but included a play kitchen, laundry center, sand and water tables, art center, listening center (where students can listen to an audiobook and follow along in a physical book), writing center, library/cozy corner, dramatic play center (with puppets), guided reading table, and dry erase center (for students to practice writing). Examples of new materials and resources included technology (panel boards and iPads), audiobooks, and classroom manipulatives.

Table 2. Number of renovated classrooms by school

School	Number of Classrooms
Bache-Martin	13
Bryant	18
Dunbar	11
Edmonds	17
Emlen	11
Ethel Allen	12
Mitchell	12
Morris	8
Munoz-Marin	16
Potter-Thomas	13
Total	131

Approximately 2000 students, mostly economically-disadvantaged students of color, benefited from the renovations.

Across the ten schools that received renovations in all of their early elementary classrooms, K-3 enrollment ranged from 90 students at Morris to 270 at Munoz-Marin (Table 3). Nine of the ten schools (all except Bache-Martin) had 100% of their enrollment certified as economically disadvantaged and had student populations of mostly Black and Hispanic/Latinx (again, with the exception of Bache-Martin) students.

Table 3. 2019-20 student demographics by school

	Bache-Martin	Bryant	Dunbar	Edmonds	Emlen	Ethel Allen	Mitchell	Morris	Munoz-Marin	Potter-Thomas
Total Enrollment (K-3)	217	224	128	242	219	222	206	90	270	217
% Receiving Special Education Services	18%	5%	25%	16%	23%	5%	7%	17%	14%	10%
% English Learners	2%	0%	2%	0%	1%	0%	0%	0%	19%	19%
% Economically Disadvantaged ¹	61%	100%	100%	100%	100%	100%	100%	100%	100%	100%
% Female	49%	43%	45%	48%	47%	55%	52%	44%	53%	46%
% Black/African American	42%	96%	91%	92%	90%	95%	95%	87%	14%	25%
% Hispanic/Latinx	7%	0%	6%	2%	3%	1%	1%	6%	85%	73%
% White	41%	1%	2%	1%	0%	2%	0%	4%	0%	1%
% Asian	3%	0%	0%	0%	0%	0%	0%	1%	0%	0%
% American Indian/Alaskan Native	0%	0%	0%	0%	2%	0%	1%	0%	0%	0%
% Multi-Racial/Other	6%	2%	2%	4%	5%	1%	3%	2%	0%	1%

¹Reflects the number of students who are certified as economically disadvantaged by receiving governmental assistance, not the number of students who receive free lunch.

94 K-3 teachers received an average of 31 hours of PD.

SDP aimed to provide K-3 teachers with at least 24 hours of professional development (PD) in 2019-20 as outlined in the grant. This was interrupted when schools closed because of COVID-19 in March 2020, and SDP decided to include teachers from the 2019-20 cohort in the PD that was offered to teachers in 2020-21. As of March 15, 2021, 96% of K-3 teachers from 2019-20 received 24 hours of PD, and all teachers in this cohort received at least 21 hours (teachers will still be offered PD through the end of March).

Some teachers received more than 24 hours of PD; the average for K-3 teachers was 31 hours. All K-3 teachers received a one-on-one session from Apple focused on using the new technology in their room, as well as PD on using the new furniture and materials, teaching literacy, and teaching in an online environment (see Table 4 for a list of session titles). Pre-Kindergarten teachers received their 24 hours of PD through the Bright Futures and Head Start teams within SDP. Other school support staff, such as Early Literacy Specialists, Reading Specialists, English as a Second Language teachers, School-Based Teacher Leaders, and Special Education Teachers (who push in to general education classrooms), also attended the PDs.

Table 4. Teacher PD session titles

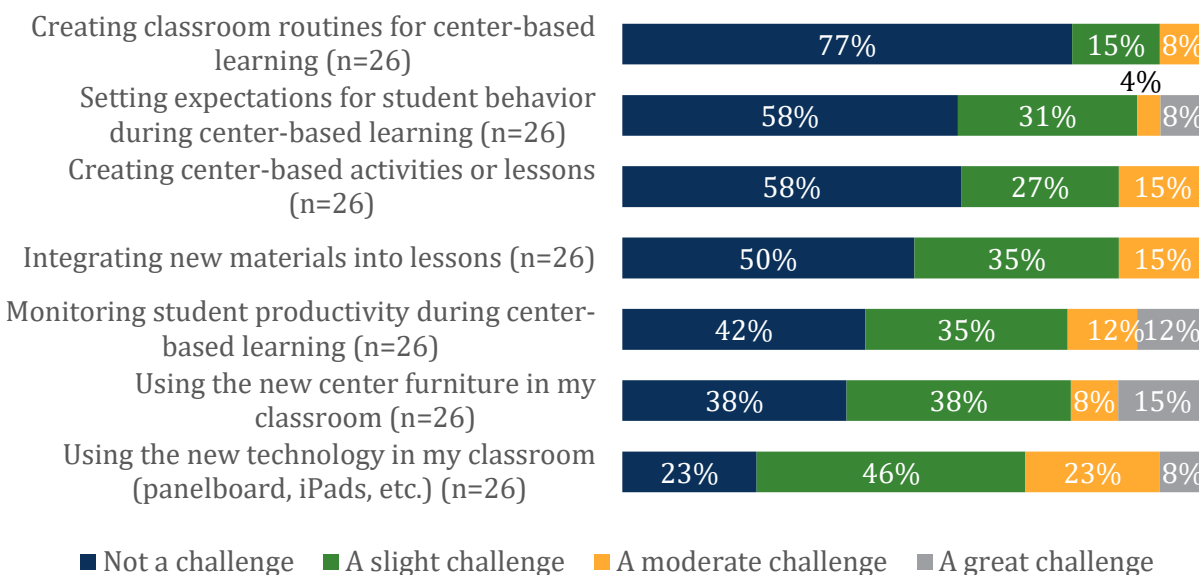
Session Title	Session Title	Session Title
Activate Learning (Student Engagement)	Creating Relevant and Accessible Asynchronous Tasks	Supporting Comprehension in Fiction: Thinking About Characters
Analyzing Data	Interactive Panel Board	Supporting Comprehension in Fiction: Understanding Plot and Setting
Collaborate with Colleagues	Introduction to Classroom Mods	Supporting Pre-Emergent and Emergent Readers
Create and Share Presentations and Demos	Knowing Your Furniture and Center Learning	Supporting Print Work: Increasing Accuracy and Integrating Sources of Information
Create Interactive Worksheets	Legos and Literacy Centers	Teaching Fluency: Reading with Phrasing, Intonation and Automaticity
Create Videos with Clips	Organize Resources for Remote Learning	Teaching Reading Engagement: Focus, Stamina, and Building a Reading Life
Creating Content for Remote Learning	Personalize Your iPad	Utilizing Keynote for Remote Learning
Creating Content in a Virtual World	Preparing Resources for Remote Learning	What are the other students doing during guided reading?

Research Question #2: To what extent are classroom teachers satisfied with the renovations and professional development?

Learning how to use new technology was a challenge for teachers.

Teachers identified using the new technology in their classroom as a challenge (77% of respondents identified technology as at least a slight challenge; Figure 1). In addition, 61% of respondents said that using the new center furniture was at least a slight challenge. More than half of respondents said that setting expectations for student behavior, creating center-based activities, and creating classroom routines were not challenges.

Figure 1. 77% of respondents said using the new technology was at least a slight challenge



Teachers would have liked more training on using new center furniture and monitoring student productivity.

Respondents said that they received the most sufficient professional development (PD) in using the new technology (Figure 2), despite reporting that new technology was a significant challenge. However, teachers rated using the new center furniture and monitoring student productivity as areas where they did not receive enough PD, which aligns with teachers identifying these areas as some of the greatest challenges. Additionally, 78% of respondents said the training they received from Apple on using the iPads for center-based learning was useful. Teachers rated after school as the preferred time to receive PD, with 36% of respondents choosing this option as their first choice (Figure 3).

Figure 2. Percent of respondents who agreed or strongly agreed that they received sufficient PD in each area

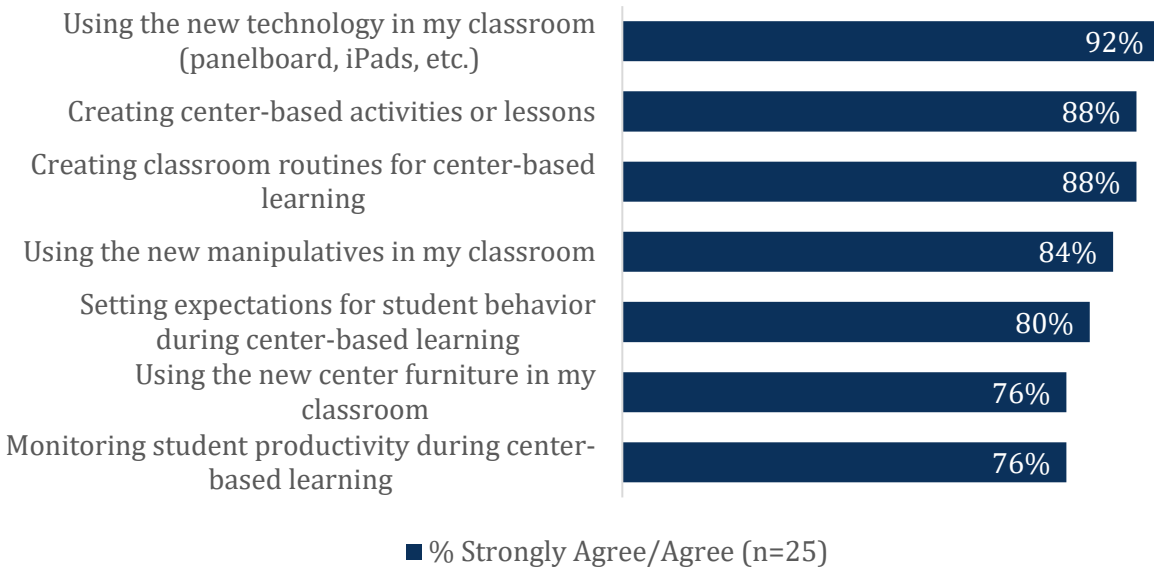
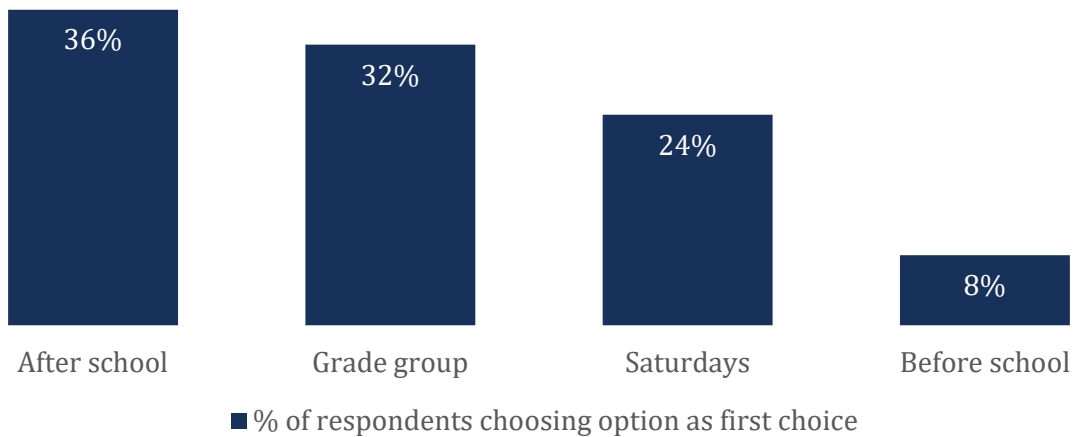


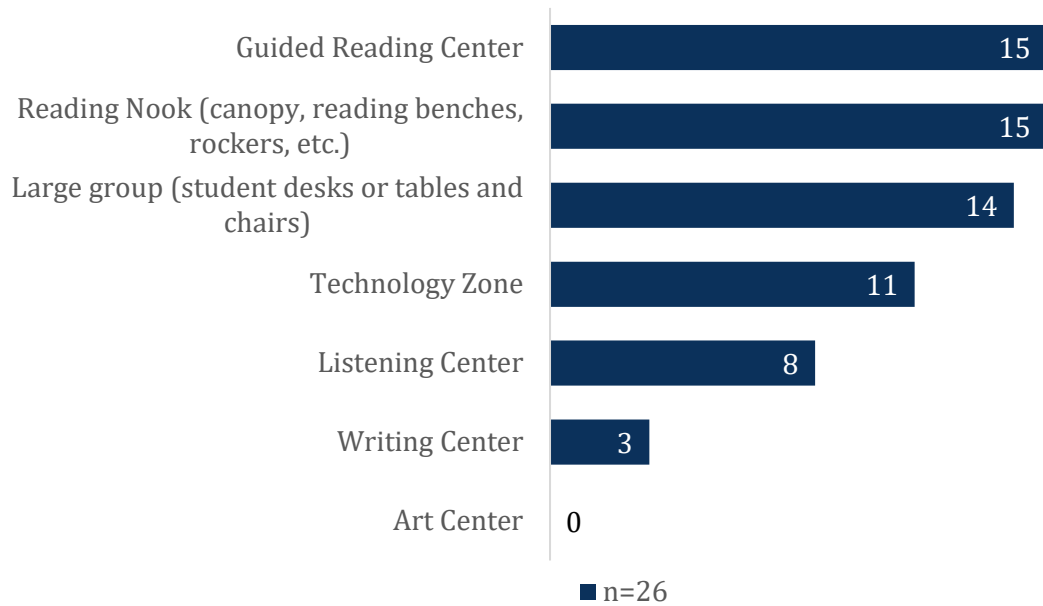
Figure 3. The highest percentage of respondents identified after school as the preferred time to receive PD, followed by grade group meetings, Saturdays, and before school



Teachers rated Guided Reading and the reading nook as the most appropriately furnished areas in their classroom and the large group furniture as the least appropriately furnished area.

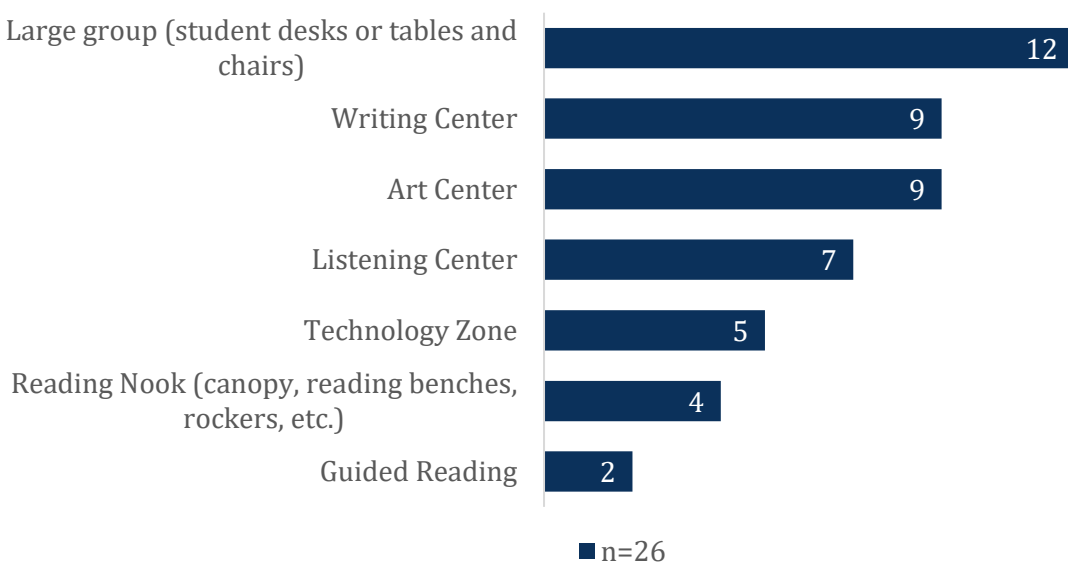
Respondents chose Guided Reading and the reading nook as the most appropriately furnished areas in their classroom, followed by student desks and the technology zone (Figure 4). When asked why they rated centers as the most appropriately furnished, the top items teachers mentioned were student engagement, sizing, allowing for group work, and providing needed technology.

Figure 4. Number of respondents choosing each area as one of three most appropriately furnished areas



Conversely, teachers chose the large group furniture (student desks or tables and chairs) as the least appropriately furnished areas, followed by the writing and art centers (Figure 5). When asked why they chose these centers as the least appropriately furnished, teachers most often mentioned the sizing of the desks (they take up too much space, they only fit together in a certain way, third graders have trouble fitting their legs under the desks), they do not use the art center, and the writing center could use more space for students to sit and do work.

Figure 5. Number of respondents choosing each area as one of three least appropriately furnished areas



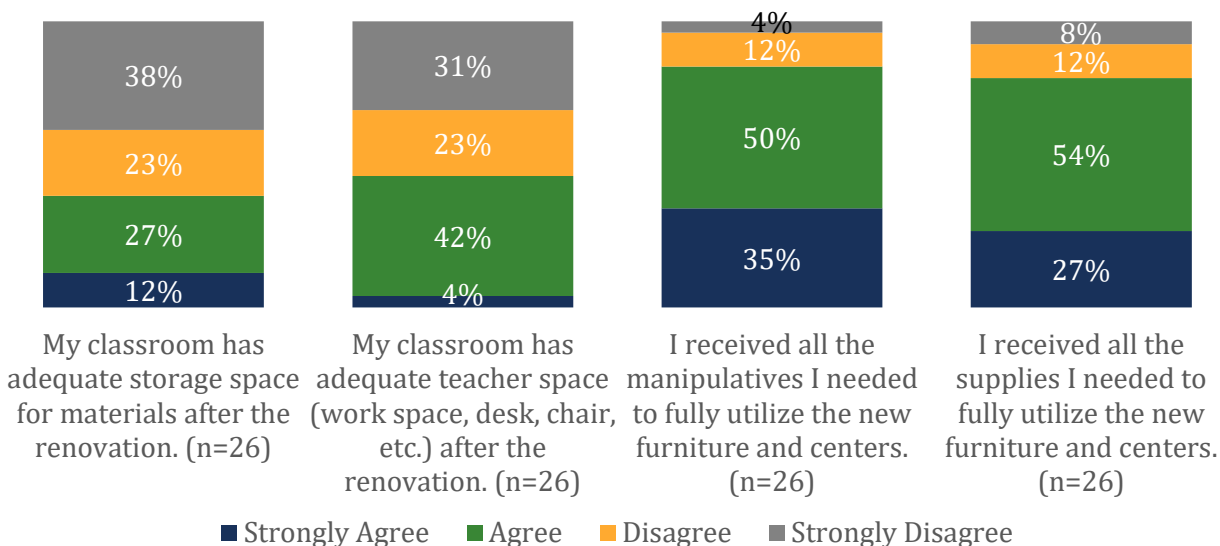
When asked about items that were most helpful and appropriate in the centers, respondents listed 24 different materials. The most frequently listed was iPads, followed by technology in general and the panelboard. The least helpful/appropriate items listed were the desks/tables and the entire listening center (teachers listed 15 different least-useful items for this question).

Teachers wanted more storage space and their preferences considered.

The majority of respondents said they received all the manipulatives and supplies they needed to utilize the new centers (85% and 81%, respectively; see Figure 6). About half of respondents (46%) agreed that their classroom had adequate teacher space. Over half of respondents (61%) felt their room did not have adequate storage space after the renovation.

Suggestions respondents had for renovating future classrooms were considering the teacher’s preferences, changing the size of the desks, providing materials earlier so that teachers had time to set up their classroom, providing more storage space and board space, providing help packing, and having PDs offered at teachers’ own schools (as opposed to teachers traveling to another school).

Figure 6. Teachers responded to questions about storage space, teacher work space, manipulatives, and supplies

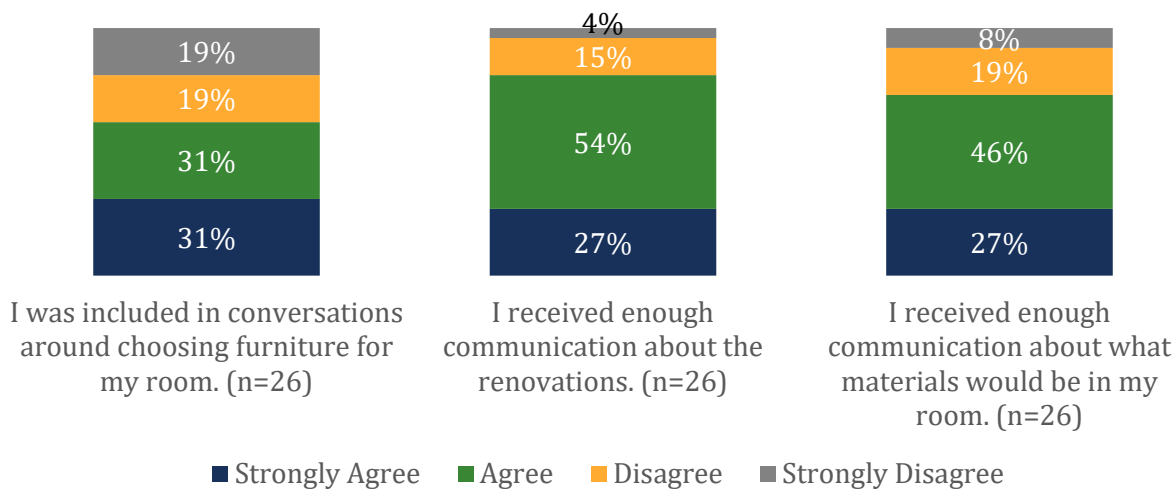


Teachers were satisfied with the amount of communication but would have liked more input in the renovations.

Most respondents agreed that they received enough communication about the renovations (81%) and about what materials would be in their room (73%; see Figure 7). A slightly smaller percentage (62%) felt they were included in conversations around choosing furniture for their classroom. Similarly, when asked what one thing they would recommend changing if the District implements this project in other schools, the most common theme was including teacher voice in designing classrooms. One teacher wrote, “Ask teachers what they need. Give teachers choices, especially with

student desks and writing center. Don't make the rooms 'cookie cutter', teachers should be given enough respect to show that they know what their students need.”

Figure 7. Teachers responded to questions about being included in conversations about furniture and receiving enough communication about the renovation and the materials



Research Question #3: How do teachers perceive changes to their instructional practices and student outcomes associated with the project?

All teachers who responded to the survey used centers daily during the literacy block.

All 27 respondents said they used centers daily during the literacy block. Additionally, 88% of respondents said they also used centers during another part of the day. Most (87%) of the respondents who used centers outside of the literacy block used them during math. Other subjects that teachers mentioned were science, social studies, social-emotional learning, and at the end of the day.

Teachers identified centers as beneficial to several components of literacy block implementation.

When asked about benefits from the project, teachers identified more opportunities for inquiry or play-based learning and improving the literacy environment as the top benefits (Figure 8). The specific components of the literacy block where teachers identified the greatest benefits were the Literacy Environment and Guided Reading (Figure 9).

Figure 8. Teachers rated how much benefit the project provided to their teaching

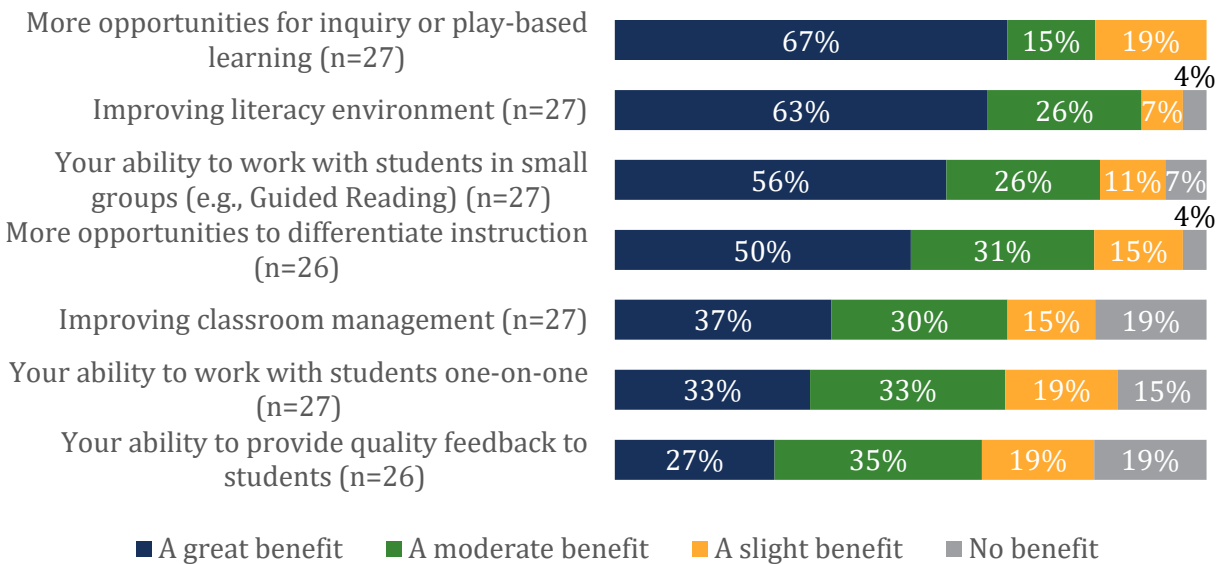
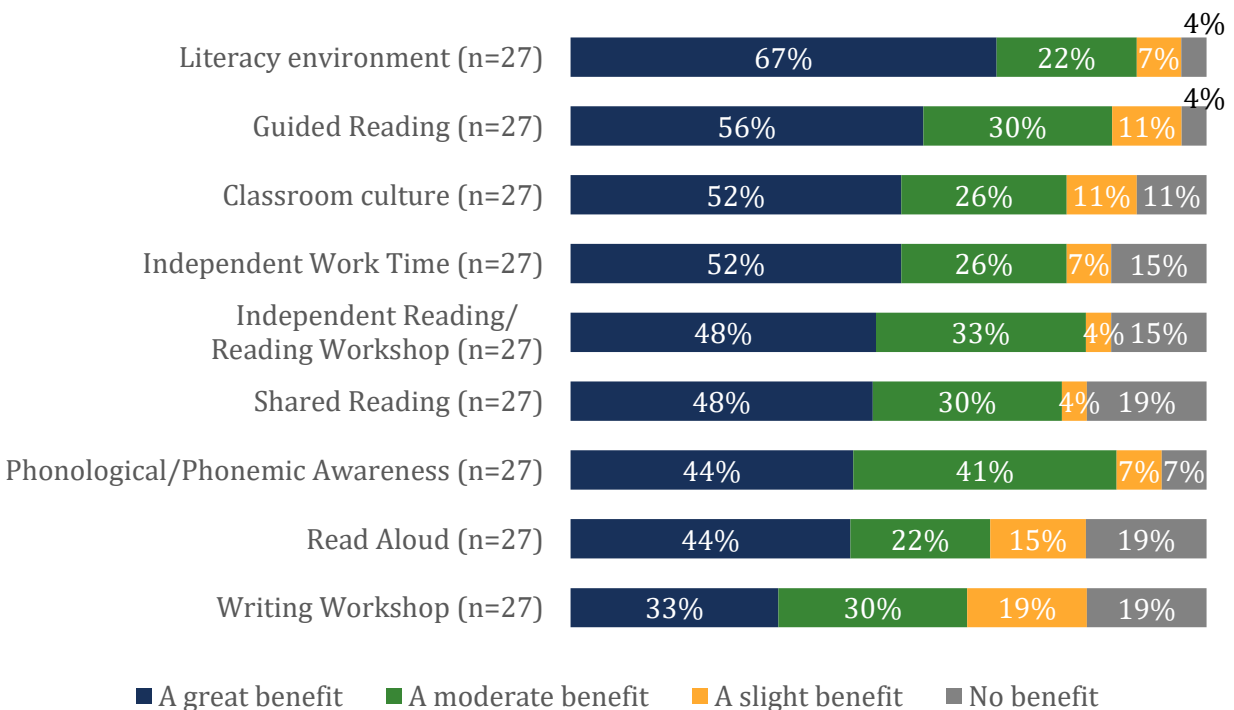


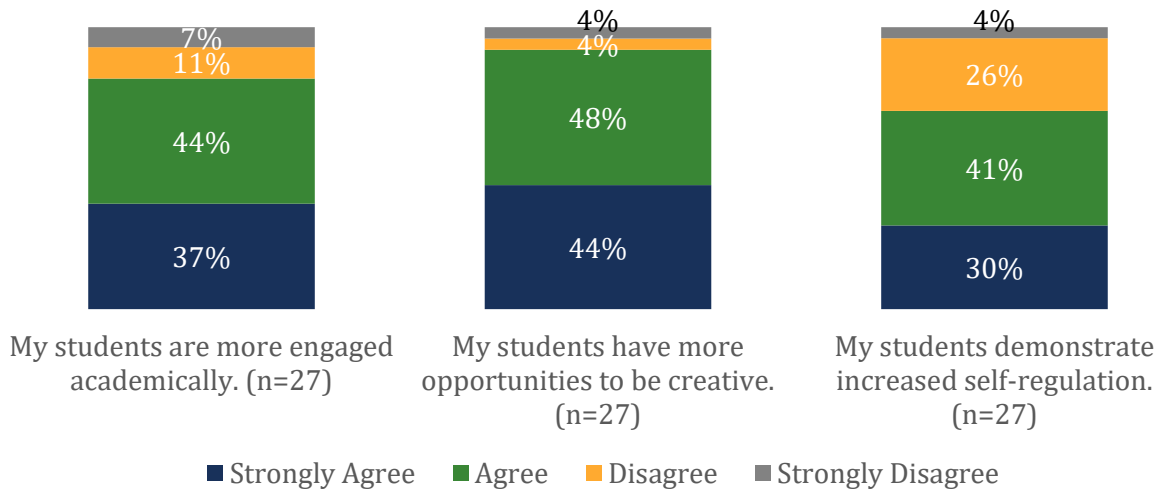
Figure 9. Teachers rated how much benefit the project provided to their ability to implement the components of the literacy block



Teachers said centers provide their students with more opportunities to be creative and academically engaged.

When asked specifically about benefits the project provided to their students, 92% of respondents said their students had more opportunities to be creative, and 81% said their students were more engaged academically (Figure 10). A slightly smaller percentage (71%) said their students demonstrated increased self-regulation.

Figure 10. 92% of respondents said their students have more opportunities to be creative



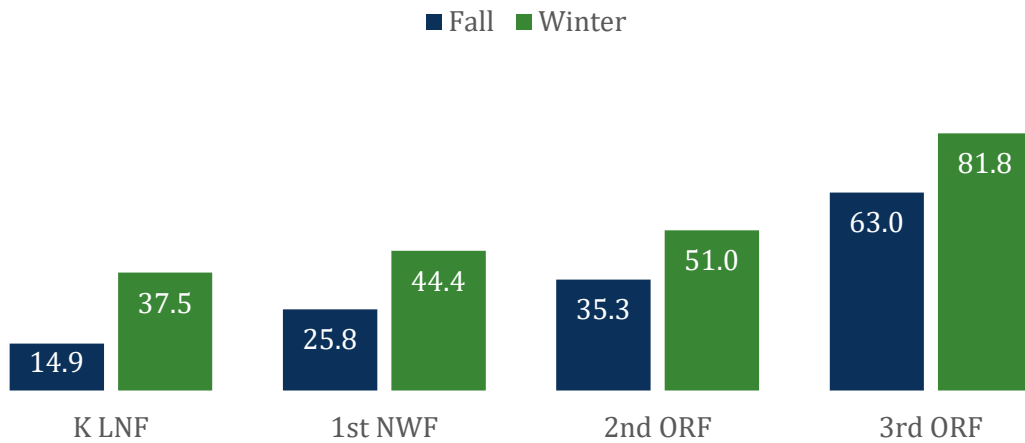
Research Question #4: Did students in the renovated classrooms show growth in literacy rates? If so, to what degree?

Kindergarten students demonstrated the most growth from fall to winter on aimswebPlus compared to first- to third-grade students

Students in renovated classrooms experienced an overall increase in their average number of correct responses on their core assessment² from fall to winter in 2019-20 (Figure 11). Kindergarten students had the largest increase in their average number correct responses (+22.6), while second-grade students experienced the lowest (+15.7).

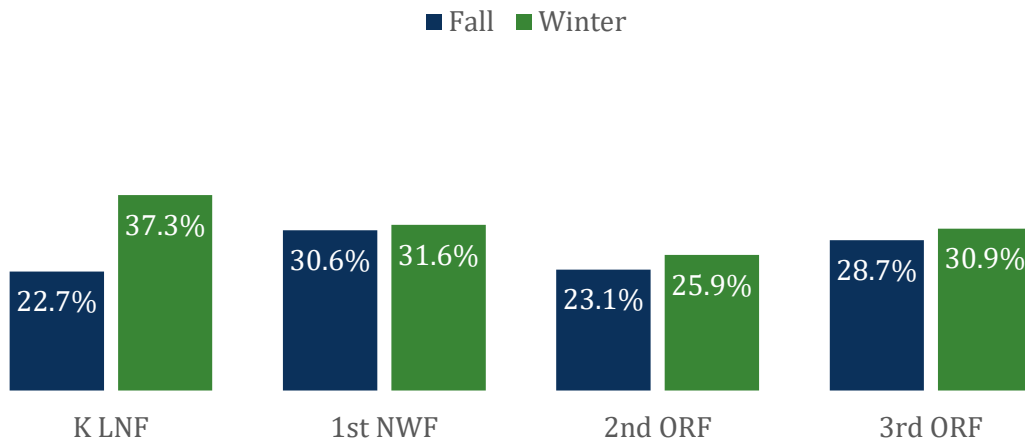
² Definitions of core assessments are on page 5.

Figure 11. K-3 students' average number of correct responses from fall to winter



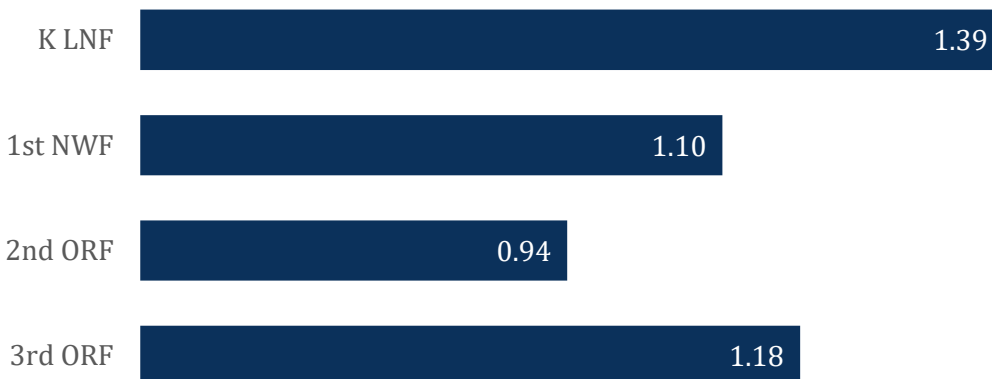
All students in renovated classrooms experienced an increase in their average national percentile rank from fall to winter. This indicates that students' number of correct responses increased between fall and winter at a rate high enough to increase their national percentile ranking (NPR). Kindergarten students had the biggest increase in their average national percentile rank (14.6%, Figure 12).

Figure 12. K-3 students' National Percentile Rank (NPR) from fall to winter



Rate of Improvement (ROI) is the number of points a student increased per week between assessment periods. Kindergarten and third-grade students had the highest average ROIs (1.39 and 1.18, respectively, see Figure 13).

Figure 13. K-3 students' fall to winter Rate of Improvement



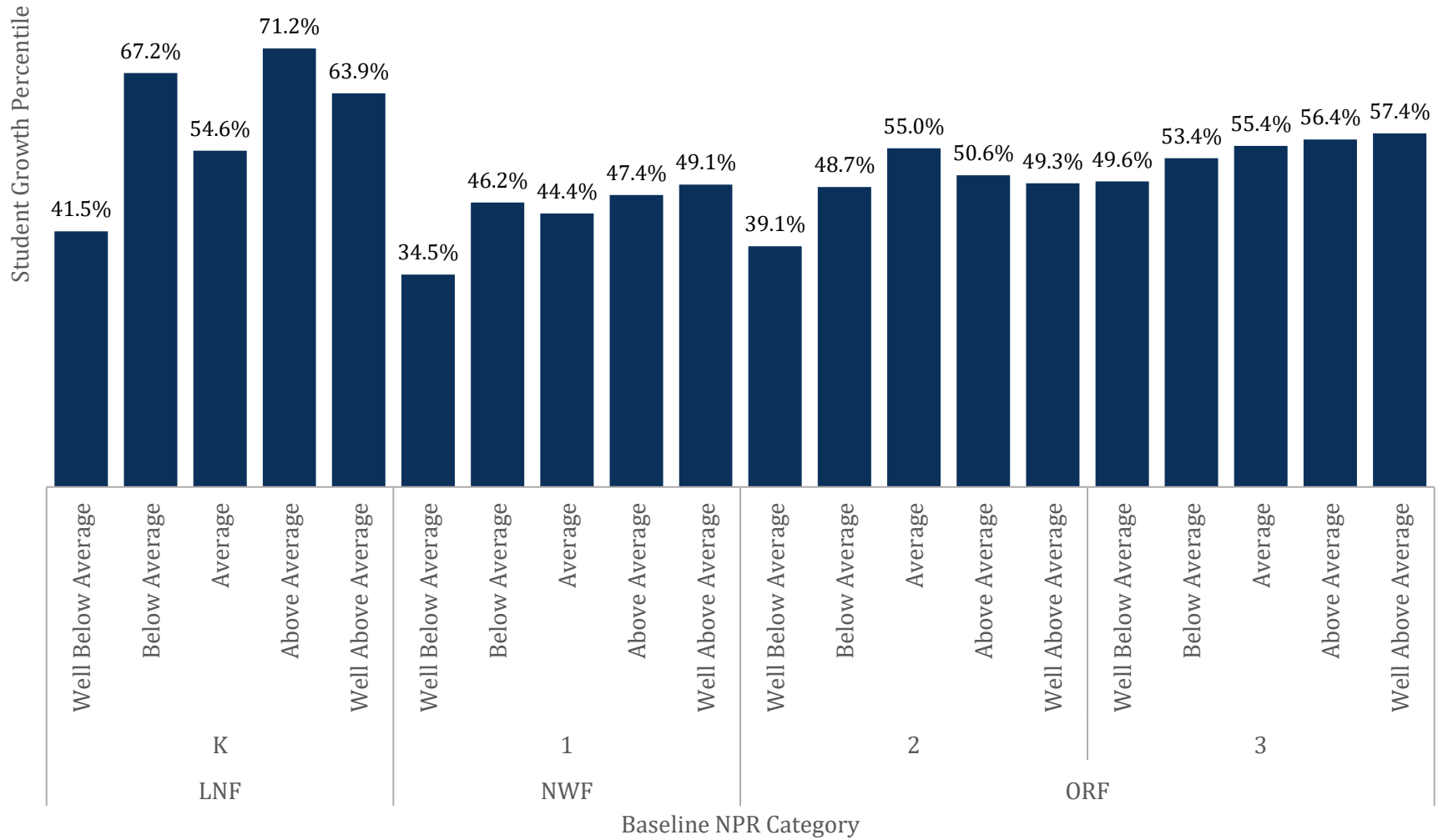
Student Growth Percentiles (SGPs) are used to measure the students' growth compared to other students across the country with similar baseline (fall) scores. Students' fall scores are used to categorize students by performance level from *Well Below Average* to *Well Above Average* based on their NPR. Sixty percent of students were placed in the *Well Below Average* or *Below Average* categories at baseline (Table 6).

Table 5. Just over half of students' fell into the *Well Below Average* or *Below Average* categories at baseline

Grade	Assessment	Number Assessed	Well Below Average (1-10%)	Below Average (11-25%)	Average (26-74%)	Above Average (75-89%)	Well Above Average (90%-99%)
K	LNF	436	45.2%	20.6%	29.1%	3.0%	2.1%
1	NWF	482	30.9%	24.1%	34.6%	4.4%	6.0%
2	ORF	463	48.6%	15.8%	30.7%	3.5%	1.5%
3	ORF	484	40.3%	15.7%	32.2%	7.4%	4.3%
Total		1,865	41.1%	19.0%	31.7%	4.6%	3.5%

After students are categorized based on their initial NPR, SGPs are calculated by comparing the rate of improvement of students within each group. Third-grade students in renovated classrooms who were categorized as *Well Below Average* in the fall grew at a faster rate from the fall to winter assessment than Kindergarten through second-grade students who were *Well Below Average* at their fall assessment (Figure 14).

Figure 14. Kindergarten students overall had higher average student growth percentiles from fall to spring than other grades



Conclusion

SDP renovated 128 PK-3 classrooms at ten schools in the summer of 2019. Work in the classrooms included physical renovations, new furniture, and new materials and resources. Teachers attended an average of 31 hours of PD during the 2019-20 school year, and 96% of K-3 teachers had received the target 24 hours of PD by March 15, 2021. All teachers that responded to the survey are using centers daily during the literacy block. However, teachers said using new technology was a challenge and would have liked more training on using new center furniture and monitoring student productivity. Teachers wanted more storage space and to have more input into the renovations. Students' National Percentile Rank on AIMSweb increased from fall to winter across all grades.