



KEY FINDINGS:

OAKLAND RETROSPECTIVE STUDY

JANUARY 2019

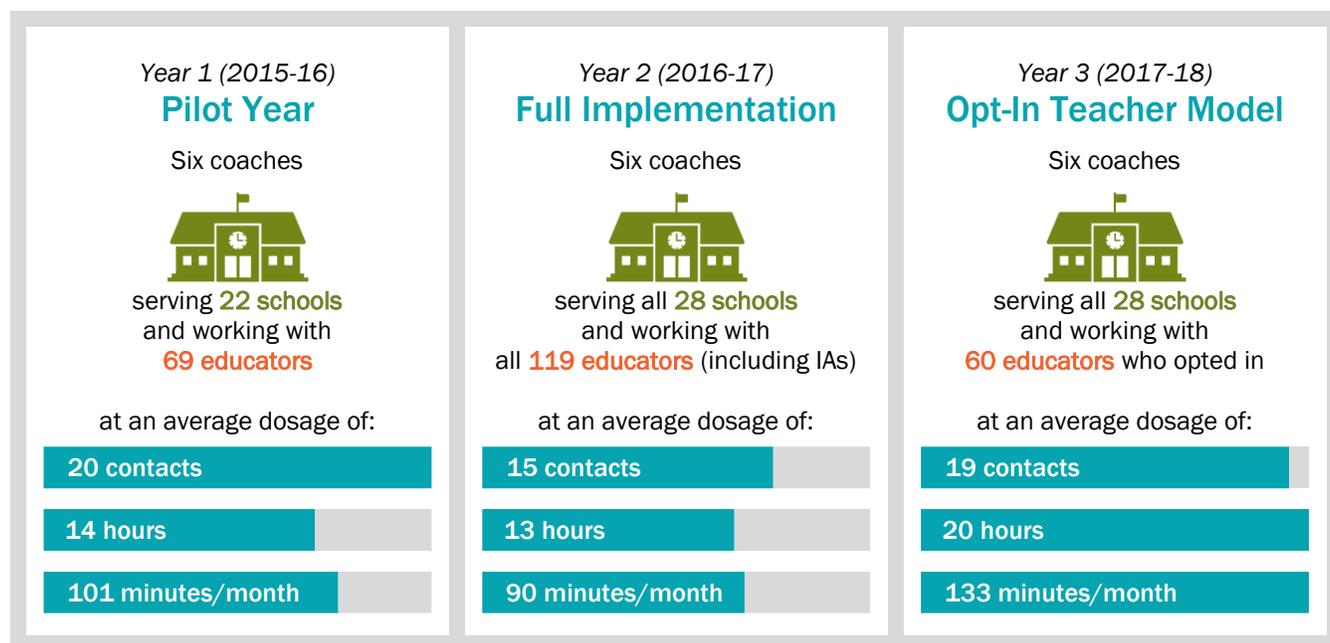


Introduction

Starting Smart and Strong (S3I), an initiative of the David and Lucile Packard Foundation, strives to ensure that all children grow up healthy and ready for kindergarten by improving the quality of adult-child interactions across all settings where young children learn and grow. Oakland Starting Smart and Strong is a local collaborative that brings together community groups, early childhood educators, city and school district leaders, and people throughout the city to create a strong foundation for young children.

As part of Oakland Starting Smart and Strong, OUSD partnered with the New Teacher Center (NTC) in 2015 to provide educators with site-based differential coaching on best practices to support early childhood development. NTC describes site-based differential coaching as an approach where the coach and teacher collaborate in a non-evaluative, strengths-based and confidential relationship aimed at increasing student learning in equitable classrooms. This includes weekly 1-on-1 meetings engaging in cycles of pre-observation, observation, and post-observation. Additionally, teachers receive monthly check-ins and attend group professional learning communities.

Six NTC coaches worked with the OUSD early learning teachers for over three years, starting in year 1 with a pilot that involved 80 percent of the early education sites. By year 2, all 28 sites and 119 educators received coaching. In year 3, OUSD and NTC switched to an opt-in model, coaching those teachers across all sites who wished to participate.



In the three years since the start of the coaching, OUSD has seen overall improvements in measures of child development, classroom quality, and teacher quality. However, it was not known how coaching had contributed to these changes. In order to evaluate the effects of the coaching, OUSD partnered with Engage R+D, a research and evaluation firm, to conduct a retrospective study of the initiative. The purpose of this study is to examine how the site-based differential coaching in OUSD early learning classrooms contributed to improvements in classroom quality, teaching quality and child development.

Methods

Engage R+D designed the evaluation study to answer the following key questions:

- Has coaching contributed to positive outcomes in the early education setting for teachers? For students? For the overall quality of the early education setting?
- What are the implications for school readiness?
- What can be learned about the dosage of coaching?

To answer these questions, Engage R+D secured data sharing agreements with OUSD and NTC to analyze the coaching and quality data that they had gathered over the previous three years. OUSD provided data from standard assessments that describe classroom and teaching quality, and child development, while NTC provided data on how and how much coaching was delivered in the classrooms to teachers:

2015-2016 – Year 1	2016–2017 – Year 2	2017–2018 – Year 3
<ul style="list-style-type: none">• Classroom quality: QRIS initial rating• Teaching quality: CLASS initial assessment• Child development: DRDP fall and spring assessments• Coaching: Learning Zone	<ul style="list-style-type: none">• Teaching quality: CLASS initial and 2nd assessment• Child development: DRDP fall and spring assessments• Coaching: Learning Zone	<ul style="list-style-type: none">• Classroom quality: QRIS re-rating• Teaching quality: CLASS 2nd assessment• Child development: DRDP fall and spring assessments• Coaching: Learning Zone

Limitations

As with any study, there are important limitations. First, this is a retrospective study, meaning we examined data that were collected up to three years prior to the start of the study. The coaching was not designed as a study from the start, meaning that we did not have the opportunity to collect primary data, do intentional sampling, or establish a control group prior to the start of coaching. For this reason, the study is not intended to determine causation. However, because the data includes standard early learning measures (i.e., DRDP, CLASS, QRIS), we are able to overcome some of these limitations because we know that the data was consistently and uniformly collected across the three years, includes multiple measures, and provides a large sample size that is representative of the entire school district. These factors make it possible to conduct a rigorous analysis comparing different dosages of coaching.

Additionally, the evaluation team acknowledges that site-based coaching was not the only intervention that teachers participated in during the three years examined in the study. From 2015 to 2018, OUSD participated in quality improvement efforts through QRIS, engaged in systems changes through Oakland Starting Smart and Strong, provided teachers with additional professional development, and more. However, because these interventions were applied across the district to all teachers, we were able to reasonably compare groups of teachers who received various amounts of coaching.

Key Findings

Child Outcomes

OUSD uses the Desired Results Developmental Profile (DRDP) as one measure of child outcomes. The DRDP is a child assessment measured by teacher observation across four domains: approaches to learning and self-regulation, social and emotional development, literacy and language development, and cognition. There is also an additional domain for dual language learners called English language development. Early learning teachers in OUSD complete the assessment of each child in the fall and again in the spring of each school year.

In order to better understand how coaching affected child outcomes, we compared the scores of children whose teachers consistently received coaching to those whose teachers were not coached in year one, and those who received less coaching in years 2 and 3 when the model was expanded to all sites.

In year 1, students progressed at the same pace regardless of whether their teachers received coaching.

In year 1, 785 children were enrolled in classrooms where teachers received training, while 358 children were enrolled in classrooms where teachers did not. It is interesting to note that, at the start of the year, children in coached classrooms had lower mean DRDP scores in each domain compared to students in non-coached classrooms. This suggests that teachers who participated in coaching may serve students or be located at sites with higher needs.

By the end of the first year, both groups saw similar improvements in mean DRDP scores. For example, children in the coached classrooms increased their language and literacy scores by 1.2 points on average, while children in non-coached classrooms increased their scores by 1.3 points. Because the students in both groups made similar gains, the scores for the non-coached classrooms also remained lower than the scores for the coached classrooms. The coaching in year 1 does not appear to have made a difference in student outcomes from fall to spring.

The results from year 2 show similar trends to year 1.

In year 2, all teachers and sites were included in coaching. In this year, 912 children were enrolled in classrooms where teachers were participating in their second year of coaching and 309 children were enrolled in classrooms where teachers were receiving their first year of coaching. The results from year 2 show similar trends to year 1. At the start of the year, children in classrooms where teachers received two years of coaching had lower mean DRDP scores in each domain compared to students in classrooms where teachers received one year of coaching. Both groups experienced similar progress from fall to spring.

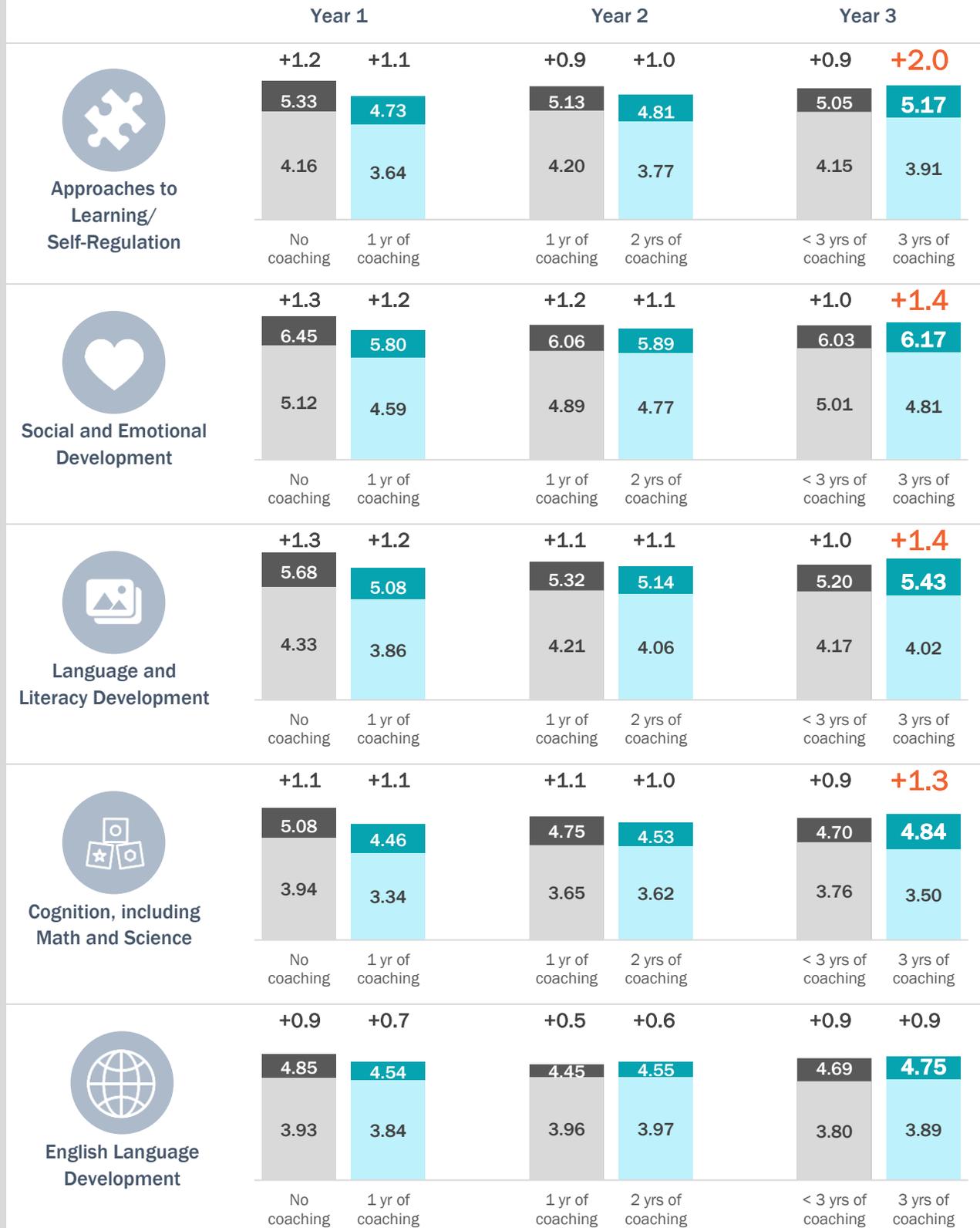
Children whose teachers received coaching for all three years performed the best across DRDP measures.

In year 3, coaching continued to be available at all OUSD sites. However, teachers were not required to participate. As a result, 831 children were enrolled in classrooms where teachers opted in to the model and were receiving their third year of coaching. 516 children were enrolled in classrooms where teachers opted out of the model after one or two years, or where teachers were currently receiving their second year of coaching after starting in year 2.

In comparing the child outcomes where teachers received three years of coaching to child outcomes for teachers who received less than three years, there appears to be a significant impact across all key outcome areas. While those in classrooms where teachers were participating in their third year of training began the year with lower scores than the other group, they made greater gains and ultimately had higher DRDP scores in every domain except for ELD at the end of the year.

The results for each year are shown in graphs on the following page.

Child Outcomes – DRDP Scores: By the end of year 3, the children in classrooms whose teachers participated in three years of coaching demonstrated the most progress over time.

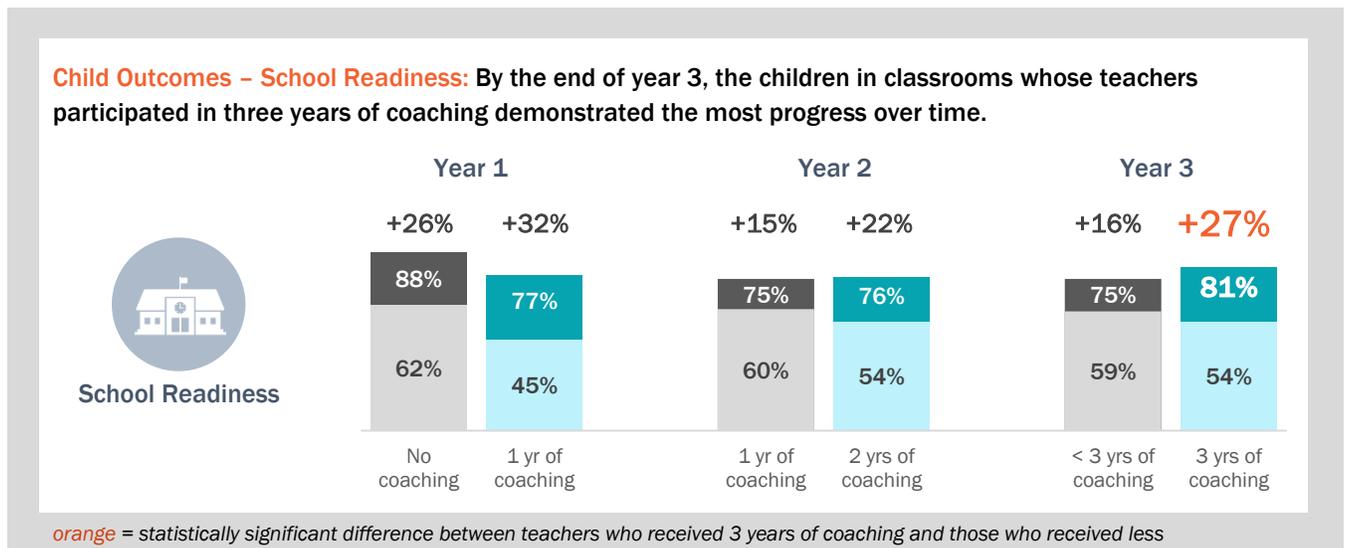


orange = statistically significant difference between teachers who received 3 years of coaching and those who received less

Children whose teachers received coaching for all three years also made more progress in terms of school readiness.

In order to understand how child outcomes translate to school readiness, an important outcome for Oakland Starting Smart and Strong, we calculated a school readiness score using the DRDP. To do this, we identified the percentage of children who were assessed as “building” or “integrating” across all DRDP domains. These students were rated as ready for school.

Similar to the DRDP outcomes, children whose teachers received no or less coaching were less likely to be identified as ready for school at the start of the year. In years 1 and 2, these students made gains toward school readiness, but were not notably different from their counterparts. In year 3, however, the group whose teachers participated in three years of coaching made bigger gains than those whose teachers received less coaching and a greater percentage were identified as ready for school.



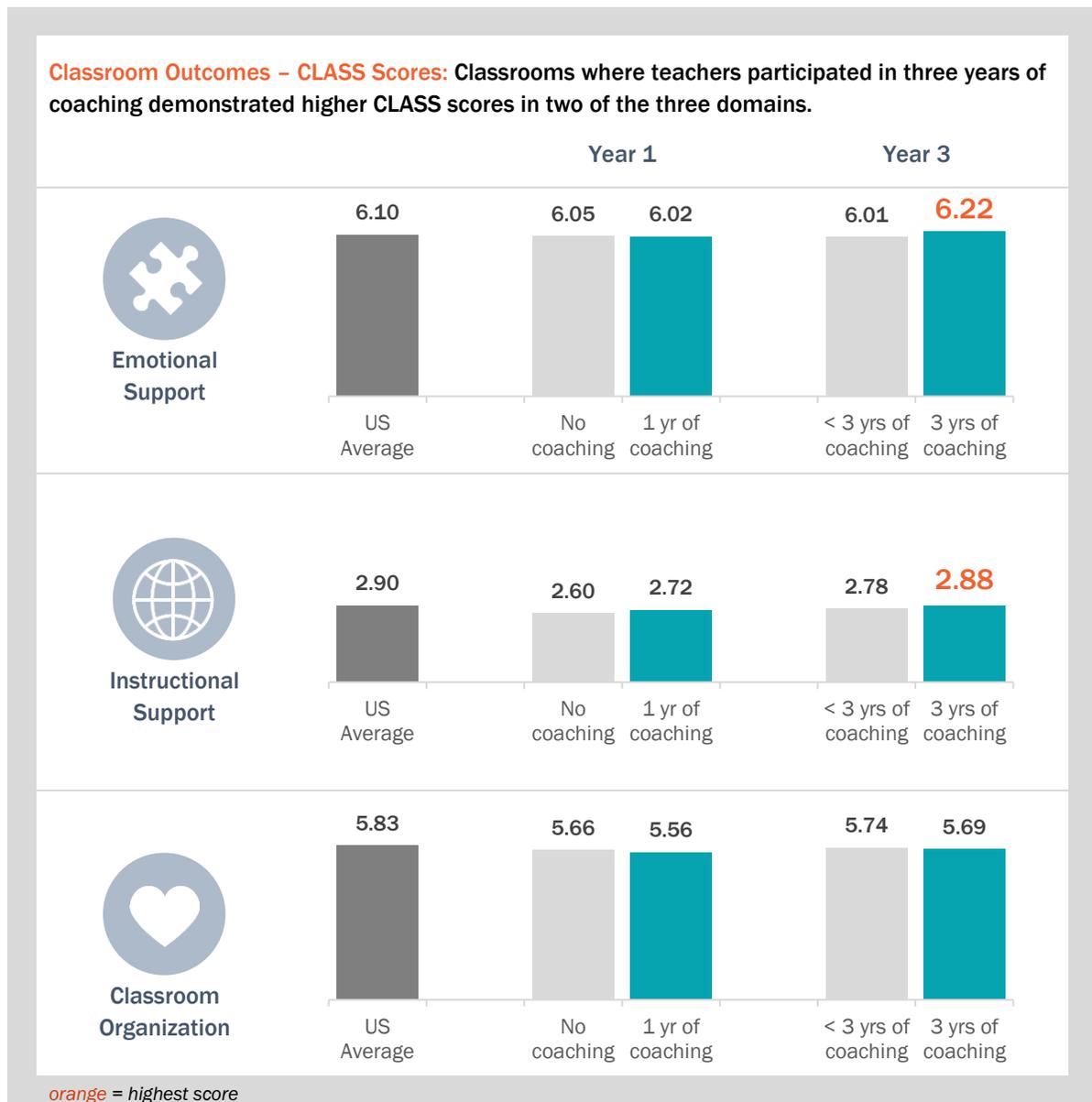
Classroom Quality

To measure the quality of teacher-child interactions in the classroom, OUSD uses the Classroom Assessment Scoring System (CLASS). Teachers are observed by an independent assessor and scored across three domains: emotional support, classroom organization, and instructional support. In OUSD, teachers/classrooms are assessed every other year. They received their initial assessment in year 1 of the study, with a second assessment in year 3.

Similar to child outcomes, we used CLASS scores to better understand how coaching affects classroom quality by comparing the scores of classrooms where teachers consistently received coaching to those where teachers were not coached in year one, and those who received less coaching in years 2 and 3 when the model was expanded to all sites.

Classrooms where teachers received coaching for all three years performed better in two of the three CLASS domains.

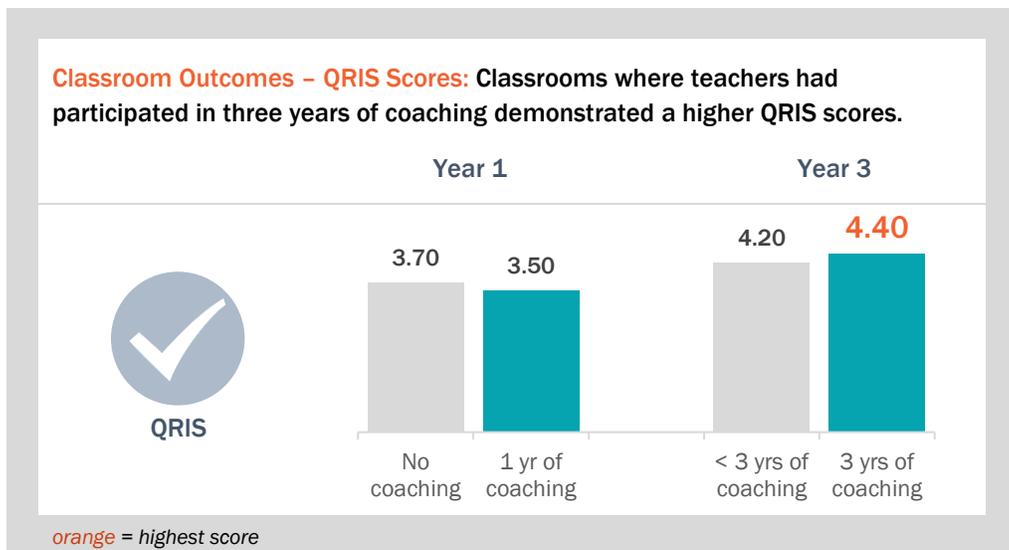
As with child outcomes, teachers who received more coaching appeared to have higher classroom outcomes after three years. Their scores approached and, in the case of emotional support, exceeded the national average.



QRIS ratings showed similar quality improvement for sites where teachers received three years of coaching.

During the study, OUSD also participated in the Alameda County Quality Counts Quality Rating and Improvement System (QRIS). QRIS assesses school sites on seven elements and gives them a rating from one to five with five as the highest quality rating. We used QRIS scores as an additional measure to understand how coaching affects quality in early learning sites.

Sites were assessed in year 1 of the study, with a second assessment in year 3. In year 1, sites where teachers received coaching scored lower (3.50) than sites that did not (3.70). This was a similar finding to other measures, and may again suggest that the sites chosen to pilot the first year of the coaching had students with higher needs. By year three, both groups showed improved scores, with all sites in Oakland scoring a four or five QRIS rating. Consistent with other findings in this report, sites with teachers who received three years of coaching made the most progress, surpassing the group with less coaching to receive the highest mean score. This reinforces the previous findings that three years of coaching appears to make a difference in quality outcomes.



Reflections

Overall, it appears that districtwide site-based differential coaching in early learning classrooms has contributed to improved outcomes for children, teachers and the quality of the sites. Coaching may also contribute positively to school readiness. Dosage of coaching was an important factor, as the findings suggest that **more coaching over time makes a difference in key outcome areas**. It was not until year 3 that we observed significant change with child outcomes and classrooms where teachers received coaching. Finally, it appears that teachers in classrooms with the highest needs may benefit the most from differential coaching as implemented by NTC coaches.

The study also suggests additional questions for consideration, including:

- **Coaching model:** What elements of coaching are most effective to create change? What dosage is most effective?
- **Teacher engagement:** How do teacher characteristics (credentials, years of experience, tenure, buy-in, etc.) affect coaching outcomes? What factors contributed to teachers opting in to the third year of coaching?
- **Classroom need:** How does coaching affect the lowest-rated classrooms?
- **Qualitative feedback:** How can coaching be improved from the perspectives of coaches and educators? How have classrooms, teachers, children benefitted from coaching?
- What are the implications for scale?

As OUSD transitions out from NTC coaching support, it will be important to consider these questions to better understand how the site-based differential coaching model can improve district-wide outcomes for young children.

DRDP Mean Scores

Exhibit 1. Year 1 Child Outcomes: DRDP Mean Scores

Domains	Overall	No Coaching	1 Year of Coaching
Approaches to Learning/Self-regulation			
Fall	3.81 (N=1,143)	4.16 (n=358)	3.64 (n=785)
Spring	4.91 (N=1,247)	5.33 (n=363)	4.73 (n=884)
Diff	1.1	1.2	1.1
Social and Emotional Development			
Fall	4.76	5.12	4.59
Spring	6.00	6.45	5.8
Diff	1.2	1.3	1.2
Language and Literacy Development			
Fall	4.01	4.33	3.86
Spring	5.26	5.68	5.08
Diff	1.3	1.3	1.2
Cognition, including Math and Science			
Fall	3.53	3.94	3.34
Spring	4.65	5.08	4.46
Diff	1.1	1.1	1.1
English Language Development			
Fall	3.87	3.93	3.84
Spring	4.65	4.85	4.54
Diff	.8	.9	.7

Exhibit 2. Year 2 Child Outcomes: DRDP Mean Scores

Domains	Overall	1 Year of Coaching	2 Years of Coaching
Approaches to Learning/Self-regulation			
Fall	3.88 (N=1,221)	4.20 (n=309)	3.77 (n=912)
Spring	4.89 (N=1,430)	5.13 (n=362)	4.81 (n=1,068)
Diff	1.0	.93	1.0
Social and Emotional Development			
Fall	4.8	4.89	4.77
Spring	5.93	6.06	5.89
Diff	1.1	1.2	1.1
Language and Literacy Development			
Fall	4.1	4.21	4.06
Spring	5.19	5.32	5.14
Diff	1.1	1.1	1.1
Cognition			
Fall	3.63	3.65	3.62
Spring	4.59	4.75	4.53
Diff	1.0	1.1	1.0
English Language Development			
Fall	3.96	3.96	3.97
Spring	4.52	4.45	4.55
Diff	.6	.5	.6

Exhibit 3. Year 3 Child Outcomes: DRDP Mean Scores

Domains	Overall	< 3 Years of Coaching	3 Years of Coaching
Approaches to Learning/Self-regulation			
Fall	4.00 (N=1,347)	4.15 (n=516)	3.91 (n=831)
Spring	5.12 (N=1,434)	5.05 (n=570)	5.17 (n=864)
Diff	1.12	.9	1.98
Social and Emotional Development			
Fall	4.88	5.01	4.81
Spring	6.11	6.03	6.17
Diff	1.23	1.02	1.36
Language and Literacy Development			
Fall	4.08	4.17	4.02
Spring	5.34	5.20	5.43
Diff	1.26	1.03	1.41
Cognition			
Fall	3.60	3.76	3.50
Spring	4.78	4.70	4.84
Diff	1.18	.94	1.34
English Language Development			
Fall	3.85	3.8	3.89
Spring	4.72	4.69	4.75
Diff	.9	.9	.9

School Readiness Mean Scores

Exhibit 4. Year 1 Child Outcomes: School Readiness Mean Scores

School Readiness	Overall	No Coaching	1 Year of Coaching
Fall	.51	.62	.45
Spring	.80	.88	.77
Diff	.29	.26	.32

Exhibit 5. Year 2 Child Outcomes: School Readiness Mean Scores

School Readiness	Overall	1 Year of Coaching	2 Years of Coaching
Fall	.56	.60	.54
Spring	.76	.75	.76
Diff	.20	.15	.22

Exhibit 6. Year 3 Child Outcomes: School Readiness Mean Scores

School Readiness	Overall	< 3 Years of Coaching	3 Years of Coaching
Fall	.55	.59	.54
Spring	.79	.75	.81
Diff	.24	.16	.27

CLASS

Exhibit 7. Classroom Outcomes: Initial CLASS scores (N=52 classrooms)

Domains	US Average	Overall	No Coaching	1 Year of Coaching
Emotional Support	6.1	6.03	6.05	6.02
Classroom	5.83	5.59	5.66	5.56
Instructional Support	2.9	2.68	2.60	2.72

Exhibit 8. Classroom Outcomes: Second CLASS scores (N=52 classrooms)

Domains	US Average	Overall	No Coaching	1 Year of Coaching
Emotional Support	6.1	6.14	6.01	6.22
Classroom	5.83	5.71	5.74	5.69
Instructional Support	2.9	2.84	2.78	2.88

QRIS

Exhibit 9. Classroom Outcomes: Initial QRIS ratings (N=28 sites)

	Overall	No Coaching	1 Year of Coaching
Mean	3.6	3.7	3.5
2 rating	1%	3%	0%
3 rating	42%	28%	48%
4 rating	57%	69%	52%

Exhibit 10. Classroom Outcomes: Second QRIS ratings (N=28 sites)

	Overall	< 3 Years of Coaching	3 Years of Coaching
Mean	4.3	4.2	4.4
4 rating	70%	84%	61%
5 rating	30%	16%	39%