Independent Evaluation of California's Race to the Top-Early Learning Challenge Quality Rating and Improvement System:

Cumulative Technical Report Appendices

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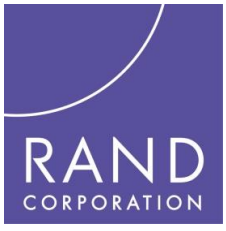

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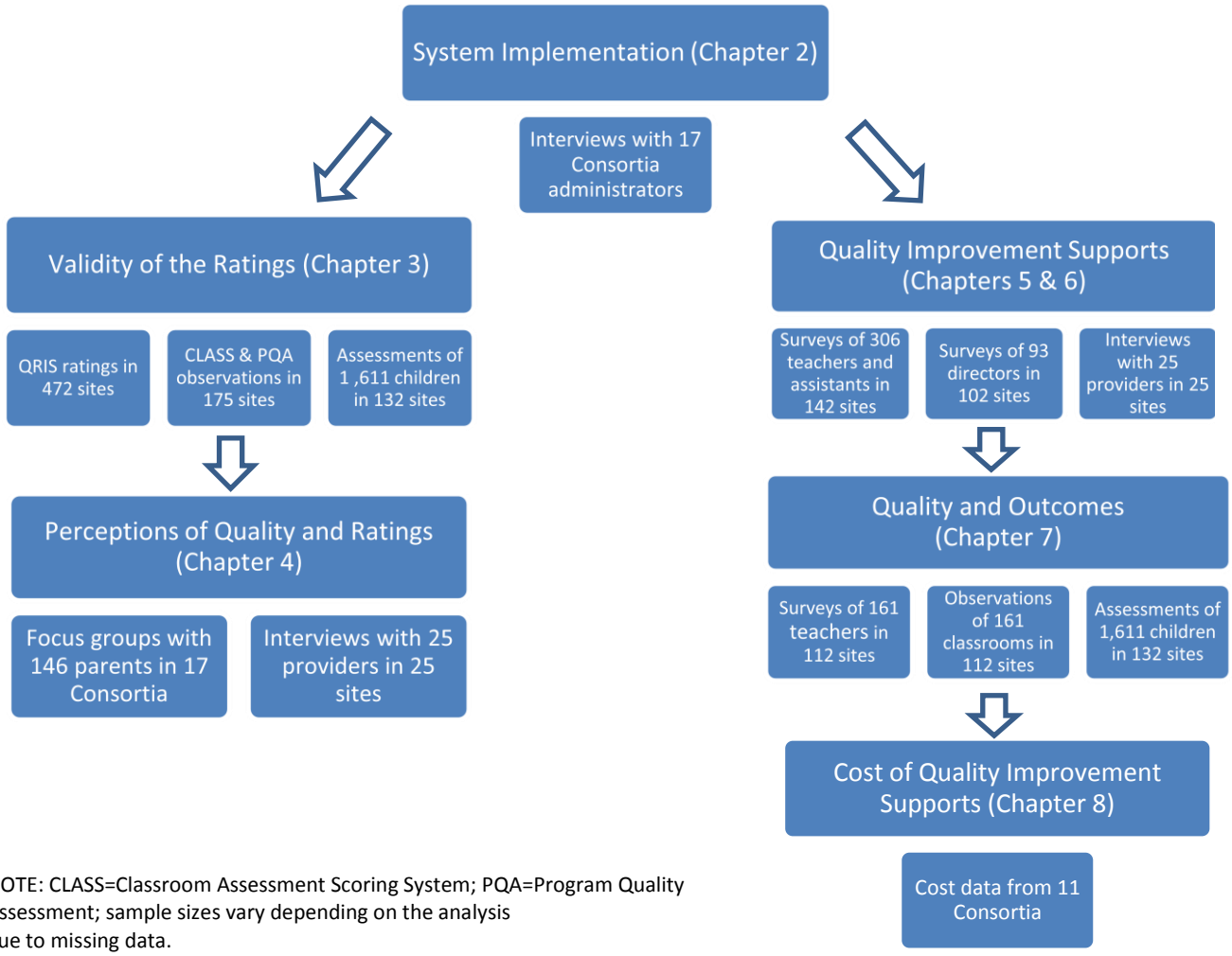
Appendix 1A. Evaluation Study Methods

The Independent Evaluation of California's Race to the Top – Early Learning Challenge (RTT-ELC) Quality Rating and Improvement system (QRIS) includes six different study components that are used to address a wide range of research questions. These components draw on various sources of data (as shown in exhibit 1A.1) and focus on:

1. System implementation
2. Validation of the ratings
3. Perceptions of the ratings
4. Quality improvement supports
5. Quality and outcomes
6. Cost analysis

Exhibit 1A.1. Structure of the RTT-ELC QRIS Evaluation and Report



NOTE: CLASS=Classroom Assessment Scoring System; PQA=Program Quality Assessment; sample sizes vary depending on the analysis due to missing data.

This appendix describes in detail the methods—the study samples, data sources, and procedures—associated with each of these study components.

Study Sampling and Recruitment

The study draws on a complex set of data drawn from several overlapping samples of early care and education programs participating in California's Quality Rating and Improvement System (QRIS). We began with a comprehensive list of all programs participating in the QRIS as of January 2014 (N = 1,272), which was compiled from separate lists of programs from each of the 17 Consortia. Approximately one third of these sites had full and complete ratings (N = 472) and could be included in the study.

In spring 2014, we invited all programs with full ratings to participate in the study. In order to recruit programs to participate in the study, we first worked with the Consortia to help garner buy-in for the study. We began by holding a webinar for the Consortia where we provided an overview of the study and addressed questions and concerns expressed by the Consortia. We then asked the Consortia to send an introductory e-mail to all sites. Our study team followed up with an additional e-mail addressed to the sites and then began calling sites to invite them to participate in the study. We e-mailed and called all eligible sites and followed up with additional phone calls and e-mails as needed to gain participation agreements with the sites. As a part of this process, we also provided a website for sites with a webinar overview of the study, available in both English and Spanish. In addition, we provided written materials to answer sites' questions and address potential concerns about the study.

A second wave of recruitment occurred in summer/fall 2014 to confirm that sites that participated in the validation study (spring 2014 observations) would continue their participation in the outcomes study (fall 2014/spring 2015 child assessments, spring 2015 observations, and spring 2015 surveys), to recruit additional sites, and to recruit families and obtain their consent for their children's participation in the study. All sites that participated in the validation study were invited to continue their involvement through the outcomes study component of the evaluation. Sites that did not participate in the validation study but that indicated interest also were invited to participate.[1] We e-mailed and called all eligible sites and followed up as needed to determine their willingness to participate in the second year of data collection.

Sample Sizes

From the 472 sites with full ratings, we determined that 50 sites were ineligible for study participation because of site closure, use of a language other than English or Spanish (and therefore classroom observations could not be conducted by our Spanish/English bilingual observers), being part of a Consortium that did not provide full ratings in time for recruitment, no age eligible children, or other reasons. Sixteen of these sites were unresponsive to our communications and never provided a final response to our invitation to participate.

[1] This group included primarily sites that came on board too late in spring 2014 to receive a classroom observation during the 2013–14 program year.

We secured participation agreements for the first year of the study (2013-14) from 195 sites out of the total of 422 eligible sites. However, because of recruitment delays resulting from extended negotiations with Consortia, we were unable to schedule and conduct data collection at eight of these sites. Classroom observation data were obtained for at least some classrooms (either through independent observations conducted by study field staff or through extant data provided by the Consortia) from 187 sites. Complete data on the CLASS or Program Quality Assessment (PQA) were obtained for 175 sites (and 294 classrooms), which compose the sample for the quality analyses. From among those observed sites, 167 had complete CLASS data. In the second year (2014-15), 143 sites agreed to participate in the outcomes study component of the evaluation. We conducted surveys of staff in each of these sites, and all but one provided survey data from at least one lead teacher. Director surveys were also administered in these sites; these data were included in descriptive analyses only. In spring 2015, we gathered complete CLASS observations in 141 sites (and 232 classrooms). Finally, we collected child assessment data in 132 sites from among those serving preschool aged children. Exhibit 1A.2 provides an overview of the sample size for each study component.

Exhibit 1A.2. Sample Sizes for Each Study Component from Among Programs With Full Ratings

	N
Number of Sites With Full Ratings	**472**
Ineligible sites	50
Number of Eligible Sites	**422**
Number of sites that agreed to participate in 2013-14	**195**
Number of sites with some observation data	187
Number of sites with complete spring 2014 CLASS or PQA data	175
Number of sites with complete spring 2014 CLASS	167
Number of sites that agreed to participate in 2014-15	**143**
Number of sites with staff survey data	142
Number of sites with spring 2015 CLASS data	141
Number of sites with child assessment data	132

Thus the study focuses on five samples of sites with full QRIS ratings as of January 2014:

- All sites with full QRIS ratings: the total set of sites with full QRIS ratings in January 2014 (*N* = 472 sites)
- Sites with 2013–14 classroom observations: a subsample of sites that received classroom observations in the 2013–14 program year (*N* = 175 sites, and 294 classrooms)
- Sites with 2014–15 classroom observations: a subsample of sites that received classroom observations in the 2014–15 program year (*N* = 141 sites, and 232 classrooms)

- Sites with staff surveys: a subsample of sites in which staff responded to a survey about quality improvement (QI) activities in spring 2015 (N = 142 sites, and 406 staff members, including directors, teachers, coteachers, assistant teachers, and family child care home [FCCH] providers)

- Sites with child assessments: a subsample of sites in which the study team conducted child assessments in both the fall and spring of the 2014–15 program year (N = 132 sites and 1,611 children)

More information about each of these samples follows, including descriptive statistics presented in exhibit 1A.3. The subsamples overlap with each other by design, but the overlap is not 100 percent and specific analyses that use data from two or more of these subsamples will have different sample sizes as reported in the results for each analysis.

Programs With Full QRIS Ratings

Study analyses that only require existing data collected for QRIS ratings use the sample of programs with full QRIS ratings as of January 2014. Programs with full ratings were identified by each Consortium and include those programs with complete rating data on all required elements. Data files received from the Consortia were initially reviewed for completeness, and some back and forth with Consortia was necessary to ensure that data were complete or were corrected where needed. Of the 1,272 programs participating in the QRIS, 472 programs (365 centers and 107 FCCHs) in 12 of the 17 Consortia had full ratings. The relatively low percentage of participating programs with full ratings (37 percent) reflects the early stage of implementation of California's RTT-ELC QRIS during the study period. Of the remaining 800 participating programs without full ratings, 552 had provisional ratings based on incomplete or estimated element scores and 248 did not yet have any assigned rating. Programs with provisional ratings could not be included in the study analyses because the provisional rating data are not reliable nor are they comparable to the rating data for programs with full ratings.

The sample of programs with full ratings in January 2014, early in QRIS implementation, is not representative of all programs participating in California's QRIS. The programs with and without full ratings differ significantly across some program characteristics, as shown in exhibit 1A.4. Programs with full ratings are more likely than programs without full ratings to have standards-based public funding requiring programs to meet specific quality standards for State Preschool, the Child Signature Program (CSP), or Head Start, although the prevalence is quite high among both categories of programs participating in the QRIS.[2] Because programs without full ratings are less likely to receive this type of standards-based funding (particularly CSP), there may be greater diversity in the quality ratings of these programs when they are finalized, in comparison with programs that already have full ratings. Fully rated programs also are more likely to receive child care subsidy vouchers as well as private pay. Fully rated programs are less likely to use a language other than English during the program day with children compared with non-fully rated programs.

[2] In the early phases of RTT-ELC implementation, California prioritized enrollment of programs receiving public funding in the QRIS, in response to RTT-ELC guidelines on the inclusion of programs serving high-need children.

Exhibit 1A.3. Characteristics of Programs With Complete Data, by Data Source

	Programs With Full Ratings		Programs With 2013–14 Classroom Observations		Programs With 2014–15 Classroom Observations		Programs With Staff Surveys		Programs With Child Assessments	
	N	Percentage	*N*	Percentage	*N*	Percentage	*N*	Percentage	*N*	Percentage
Program Type										
Center-Based	365	77%	148	85%	117	83%	95	88%	113	86%
FCCH	107	23%	27	15%	24	17%	13	12%	19	14%
Funding Sources (Programs May Have Multiple Sources)	452		167		138		105		129	
Standards-Based Public Funding (CSP, Title 5, or Head Start)	382	85%	148	89%	111	79%	88	81%	106	80%
First 5 California CSP 1 or CSP 2 Funding	222	49%	65	39%	55	39%	47	44%	53	40%
California Title 5 (State Preschool, General Child Care, or Cal-SAFE) Funding	249	55%	87	52%	71	50%	61	56%	70	53%
Federal Head Start or Early Head Start Funding	149	33%	70	42%	55	39%	39	36%	53	40%
State-/Federally-Funded Child Care Subsidy Vouchers	169	37%	35	21%	36	26%	23	21%	29	22%
Private Pay	192	47%	47	28%	38	27%	27	25%	33	25%
Language Spoken With Children	445		163		110		82		105	
Non-English Language Spoken With Children	256	58%	113	69%	110	78%	82	76%	105	80%
Spanish Spoken With Children	249	56%	112	69%	100	71%	72	67%	95	72%
Consortia	472		175		141		108		132	
Alameda	17	4%	4	4%	8	6%	7	6%	7	5%
Contra Costa	8	2%	0	0%	0	0%	0	0%	0	0%
El Dorado	0	0%	0	0%	0	0%	0	0%	0	0%
Fresno	5	1%	5	3%	5	4%	5	5%	4	3%

	Programs With Full Ratings		Programs With 2013–14 Classroom Observations		Programs With 2014–15 Classroom Observations		Programs With Staff Surveys		Programs With Child Assessments	
	N	**Percentage**	***N***	**Percentage**	***N***	**Percentage**	***N***	**Percentage**	***N***	**Percentage**
LA OCC [Los Angeles Office of Child Care]	52	11%	18	10%	15	11%	8	7%	12	9%
LAUP [Los Angeles Universal Preschool]	97	21%	52	30%	36	26%	19	18%	34	26%
Merced	0	0%	0	0%	0	0%	0	0%	0	0%
Orange	8	2%	7	4%	8	6%	6	6%	8	6%
Sacramento	27	6%	12	7%	10	7%	10	9%	10	8%
San Diego	89	19%	32	18%	18	13%	18	17%	18	14%
San Francisco	102	22%	11	6%	8	6%	6	6%	6	5%
San Joaquin	13	3%	2	1%	2	1%	2	2%	2	2%
Santa Barbara	0	0%	7	4$	0	0%	0	0%	0	0%
Santa Clara	13	3%	6	3%	10	7%	10	9%	10	8%
Santa Cruz	0	0%	0	0%	0	0%	0	0%	0	0%
Ventura	41	9%	23	13%	21	15%	17	16%	21	16%
Yolo	0	0%	0	0%	0	0%	0	0%	0	0%
Full QRIS Rating With Local Adaptations	472				141		108		132	
Tier 1	4	1%	0	0%	0	0%	0	0%	0	0%
Tier 2	85	18%	22	13%	22	16%	11	10%	18	14%
Tier 3	155	33%	64	37%	48	34%	36	33%	45	34%
Tier 4	196	42%	76	43%	62	44%	53	49%	60	45%
Tier 5	32	7%	13	7%	9	6%	8	7%	9	7%
	N	**Mean (SD)**	***N***	**Mean (SD)**	***N***	**Mean (SD)**	***N***	**Mean (SD)**	***N***	**Mean (SD)**
Total Enrollment										
Average Total Enrollment: Centers	362	52.9 (32.3)	179	57.9 (33.5)	117	54.7 (30.4)	95	57.4 (31.0)	113	54.2 (28.9)
Average Total Enrollment: FCCHs	107	9.1 (4.1)	27	8.4 (3.4)	24	9.3 (3.0)	13	9.3 (2.8)	19	9.4 (3.1)

NOTE: SD=standard deviation

There also are differences in terms of the distribution of programs across Consortia, in part because five Consortia have no fully rated programs. In addition, the programs with full ratings are concentrated in four Consortia located in three large counties that had existing QRISs in place prior to RTT-ELC (Los Angeles, San Diego, and San Francisco). In contrast, programs without full ratings are spread more evenly across the 17 Consortia. There are no significant differences in the percentage of programs that are centers and FCCHs, or in the average total enrollment of either program type. Still, the differences in program characteristics indicate limited generalizability of the quality and outcome study results presented in this report.

Exhibit 1A.4. Characteristics of Programs Participating in California QRIS, With and Without Full Ratings

	Programs With Full Ratings (*N* = 472)		Programs Without Full Ratings (*N* = 800)		
	N	**Percentage**	***N***	**Percentage**	***p***
Program Type	472		800		.660
Center-Based	365	77%	610	76%	
FCCH	107	23%	190	24%	
Funding Sources (Programs May Have Multiple Sources)	452		733		
Standards-Based Public Funding (CSP, Title 5, or Head Start)	382	85%	504	67%	< .0001
First 5 California CSP 1 or CSP 2 Funding	222	49%	62	8%	< .0001
California Title 5 (State Preschool, General Child Care, or Cal-SAFE) Funding	249	55%	381	52%	.297
Federal Head Start or Early Head Start Funding	149	33%	157	21%	< .0001
State-/Federally-Funded Child Care Subsidy Vouchers	169	37%	123	17%	< .0001
Private Pay	192	42%	258	35%	.012
Language Spoken With Children	445		674		
Non-English Language Spoken With Children	256	58%	506	75%	< .0001
Spanish Spoken With Children	249	56%	501	74%	< .0001
Consortia	472		800		< .0001
Alameda	17	4%	0	0%	
Contra Costa	8	2%	54	7%	
El Dorado	0	0%	32	4%	
Fresno	5	1%	45	6%	
LA OCC	52	11%	126	16%	
LAUP	97	21%	44	6%	
Merced	0	0%	48	6%	

	Programs With Full Ratings (*N* = 472)		Programs Without Full Ratings (*N* = 800)		
	N	**Percentage**	***N***	**Percentage**	***p***
Orange	8	2%	60	8%	
Sacramento	27	6%	106	13%	
San Diego	89	19%	12	2%	
San Francisco	102	22%	9	1%	
San Joaquin	13	3%	60	8%	
Santa Barbara	0	0%	97	12%	
Santa Clara	13	3%	6	1%	
Santa Cruz	0	0%	40	5%	
Ventura	41	9%	34	4%	
Yolo	0	0%	27	3%	
Full or Provisional QRIS Rating With Local Adaptations	472		552		<.0001
Tier 1	4	1%	103	19%	
Tier 2	85	18%	162	29%	
Tier 3	155	33%	179	32%	
Tier 4	196	42%	104	19%	
Tier 5	32	7%	4	1%	
	N	**Mean (SD)**	***N***	**Mean (SD)**	***p***
Total Enrollment					
Average Total Enrollment, Centers	362	52.9 (32.3)	462	50.6 (42.2)	.396
Average Total Enrollment, FCCHs	107	9.1 (4.1)	161	8.3 (4.5)	.161

SOURCE*:* Common Data Elements 2014.

NOTES: *p* values are based on χ^2 tests for all comparisons except average total enrollment, which is based on a *t* test. QRIS ratings presented in this table are those reported by Consortia using local adaptations, and the distribution shown in this table differs from the distribution of ratings without local adaptations that were calculated for study analyses. The QRIS ratings of programs with full ratings are not directly comparable to the provisional ratings available for programs without full ratings. SD=standard deviation.

In addition, the distribution of QRIS ratings with local adaptations differs significantly across the two groups, although this comparison should be interpreted with caution because the ratings are by definition not comparable. The programs without full ratings have been assigned provisional ratings that do not use complete or verified data. The provisional ratings assigned to programs without full ratings skew lower than the full ratings assigned to programs in the fully rated group. Programs with provisional ratings are far more likely to receive low ratings of 1 or 2. This difference could suggest lower quality among programs without full ratings, but other explanations are possible. For example, programs may wait to finalize their ratings until they have met the requirements for the next rating level above their provisional rating. Also, some of the programs with provisional ratings were in that category because they were waiting to receive

the independent Classroom Assessment Scoring System (CLASS) or Environment Rating Scales (ERS) observations and had provisional ratings of two points on these elements while waiting for the observations to be completed (these programs will receive a minimum of three points and as many as five points on each element once the observations are completed, depending on the observation score, and thus may earn enough additional points for a higher QRIS rating).

Programs With 2013–14 Classroom Observations

In the spring of 2014, we recruited 195 programs to participate in the validation component of the study. Once sites agreed to participate, we collected basic information on their classrooms (for example, number and ages of children). This information was used to sample classrooms for observations according to the implementation guide procedures.

We collected complete CLASS or PQA data for classrooms selected for the study in 175 sites in spring 2014. The total number of fully rated programs (472 programs) is smaller than the original planned sample size for the classroom observation part of the study (500 programs), which was based on rating projections from 2013 estimating that more than 1,000 programs would have full ratings by 2014. With fewer than expected fully rated programs, we did not draw a random sample of programs for the classroom observations. Instead, all fully rated programs were invited to participate in classroom observations.

To reduce burden on sites, we accepted extant CLASS and ERS data from Consortia to supplement our independently conducted CLASS and ERS observations for the study. To maintain consistency with the primary data collected for the study, some restrictions were applied to the inclusion of data from the Consortia.

1. CLASS and ERS score data had to be collected recently—in August 2013 or later.
2. The CLASS and ERS data had to be collected using the instruments as published without any local adaptation of the measures.
3. Only data on classrooms sampled by AIR were used.
4. Consortia had to be able to provide AIR with raw data for every item on the observation measure, in addition to the domain scores, overall score, and the date of the observation for each observed classroom in the site.
5. The data provided to AIR had to be complete, with plausible values provided for each variable needed.

Six Consortia provided data that met these criteria and could be included in the analyses.

Programs With 2014–15 Classroom Observations

We followed up with sites participating in spring 2014 observations and contacted new sites to participate in the outcomes study in 2014-15. Directors of sites that agreed to participate in the outcomes study provided updated information on their classrooms. This updated information was used to draw a sample of classrooms for observations and child assessments. Classrooms that had been observed for the study in the previous year were given priority in the sampling process. Then additional classrooms were selected as needed to reach the target number.

The subsample of 141 programs with 2014–15 classroom observations includes all programs with complete CLASS data for classrooms selected for the study in the 2014–15 program year. This includes programs with 2013-14 classroom observations as well as additional programs that were not observed in the 2013–14 program year. These supplemental programs include programs that agreed to participate in the study in 2013-14 but were not observed because of scheduling difficulties, and programs that declined participation in the 2013–14 program due to various circumstances (such as feeling too busy) and were asked to participate in the outcomes substudy. The programs that agreed were observed in spring 2015.

Programs With Staff and Director Surveys

Directors at each of the 142 sites participating in the outcomes study were asked to provide a list of all teachers at the site. We started with a total of 543 lead and assistant teachers and then asked sites to identify one assistant teacher per classroom (whichever assistant had the most contact time with students) for inclusion in the staff survey. For sites where no assistant was identified as having more contact with children than others, we invited all assistant teachers to participate in the survey, but then, prior to analysis, we randomized the assistant teachers so that only one assistant teacher per classroom was represented in the final sample. This meant that we removed a total of 137 assistant teachers from the sample, 67 of whom had responded to the survey.

After removal of the 137 assistant teachers, our final staff survey sample was 406 teachers from 234 classrooms across 142 sites. This sample included 368 center staff as well as 38 staff from FCCHs. Although the majority of the sample were preschool teachers, we also included teachers of infant and toddler classrooms in the survey sample.

Of the 406 staff in our final sample, we had a total of 306 complete responses to the staff survey, which gave us an overall response rate of 75 percent. Looking at the number of responses of preschool lead teachers only, the response rate was 68 percent for centers and 54 percent for FCCHs. In calculating these response rates, only *completed* surveys were counted. These response rates reflect the number of complete responses we received from teachers covering the full 10-month time period (that is, either a response from the long spring 2015 survey *or* a response for both the fall 2015 and short spring 2015 survey). An additional 36 surveys were started and not completed and are not included in our final numbers. See exhibit 1A.5 and 1A.6 for characteristics of the staff and sites included in the completed staff survey sample.

Exhibit 1A.5. Consortia and Majority Classroom Age Group Represented by Staff Survey Respondents, by Facility Type

	Center	FCCH	Total
		Percentage	
Consortia			
Alameda	10.0	7.4	9.8
Fresno	5.4	3.7	5.2
LA OCC	6.1	37.0	8.8
LAUP	16.5	3.7	15.4
Orange	3.6	0.0	3.3
Sacramento	6.5	33.3	8.8
San Diego	17.6	0.0	16.0
San Francisco	6.8	7.4	6.9
San Joaquin	1.4	0.0	1.3
Santa Clara	8.6	7.4	8.5
Ventura	17.6	0.0	16.0
Majority age group			
Infant	2.9	18.5	4.3
Toddler	14.0	37.0	16.0
Preschool	83.2	44.4	79.7
Number of respondents	279	27	306

SOURCE: Authors' analysis of California QRIS Study Staff Survey.
NOTE: Majority age group represents the age group with the largest number of children within a staff respondent's classroom.

For each of the 142 center and FCCH sites in our sample, we invited a single contact to take the survey. For the FCCHs, we invited the lead teacher to participate. For the centers, we invited the site director. Although the majority of centers had a single administrator for us to contact, there were some cases in which a single program or agency administrator made site-level decisions across multiple centers. At the conclusion of the director survey, we received completed responses for a total of 89 centers and 13 FCCHs, giving us a response rate of 76 percent for center directors and 52 percent for FCCHs. (See exhibit 1A.7 for characteristics of the directors surveyed.)

Exhibit 1A.6. Characteristics of Staff Survey Respondents by Staff Type

Measure	Lead Staff	Assistant Staff	Total Staff
	Percentage		
Age			
Under 20	0.0	0.0	0.0
20–29	10.6	23.1	15.4
30–39	25.9	20.5	23.9
40–49	30.7	21.4	27.1
50–59	22.2	24.8	23.2
60 or over	10.6	10.3	10.5
[Missing]	*0.0*	*0.0*	*0.0*
Race-ethnicity			
Hispanic	56.0	81.6	65.9
White only	19.2	0.9	12.2
Black only	6.0	6.1	6.1
Asian only	13.2	8.8	11.5
Other only	2.8	1.8	2.4
Multiracial	2.8	0.9	2.0
[Missing]	*3.7*	*2.6*	*3.3*
Highest education level			
Some high school	1.1	7.8	3.7
GED	0.0	4.3	1.7
High school diploma	4.9	9.5	6.6
Some college (no degree)	18.9	36.2	25.6
Associate's degree	22.7	22.4	22.6
Bachelor's degree	37.8	17.2	29.9
Some graduate coursework	8.1	1.7	5.7
Master's degree	6.5	0.9	4.3
Ed.D., Ph.D., J.D., or other higher degree	0.0	0.0	0.0
[Missing]	*2.1*	*0.9*	*1.6*
Teaching experience with children birth to age 5			
Less than 2 years	34.9	49.6	40.5
2 to 5 years	21.7	28.2	24.2
6 to 10 years	14.3	10.3	12.8
11 to 25 years	21.7	7.7	16.3
26 or more years	7.4	4.3	6.2
[Missing]	*0.0*	*0.0*	*0.0*
Current college degree enrollment			
Enrolled in ECE-related major	18.7	29.3	22.8
Enrolled in non-ECE-related major	1.1	0.9	1.0
Enrolled, no major decided	1.7	0.0	1.0
Not enrolled	78.6	69.8	75.2
[Missing]	*3.7*	*0.9*	*2.6*
Primary language			
English	57.5	41.4	51.3
Spanish	31.9	52.6	39.8
Another language	10.6	6.0	8.9
[Missing]	*0.5*	*0.9*	*0.7*
Number of respondents	189	117	306

SOURCE: Authors' analysis of California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage distributions are computed for nonmissing cases and may not sum to 100 because of rounding. The percentage of missing cases is shown for each measure for reference. ECE=early childhood education.

Exhibit 1A.7. Characteristics of Site Directors: All Sites

	All
Measure	Percentage
Age	
Under 20	1.0
20–29	0.0
30–39	16.8
40–49	36.6
50–59	36.6
60 or over	8.9
[Missing]	*1.0*
Race-ethnicity	
Hispanic	45.5
White only	23.2
Black only	13.1
Asian only	7.1
Other only	0.0
Multiracial	11.1
[Missing]	*2.9*
Highest education level	
Some high school	1.0
GED	0.0
High school diploma	2.9
Some college (no degree)	9.8
Associate's degree	13.7
Bachelor's degree	35.3
Some graduate coursework	4.9
Master's degree	30.4
Ed.D., Ph.D., J.D., or other higher degree	2.0
[Missing]	*0.0*
Years as director/supervisor or teacher of children birth to age 5	
Less than 2 years	7.8
2 to 5 years	16.7
6 to 10 years	17.7
11 to 25 years	42.2
26 or more years	15.7
[Missing]	*0.0*
Have a Child Development Site Supervisor Permit	
Yes	49.5
No	48.5
Don't know	2.0
[Missing]	*1.0*
Have a Child Development Director Permit	
Yes	39.4
No	58.6
Don't know	2.0
[Missing]	*2.9*
Current college degree enrollment	
Enrolled in ECE-related major	19.8
Enrolled in non-ECE-related major	3.0
Enrolled, no major decided	0.0

	All
Measure	Percentage
Not enrolled	77.2
[Missing]	*1.0*
Primary language	
English	79.2
Spanish	17.8
A language other than English or Spanish	3.0
[Missing]	*1.0*
Number of sites	102

SOURCE: Authors' analysis of California QRIS Study Director Survey.

NOTE: Includes center and FCCH sites. Percentage distributions are computed for nonmissing cases and may not sum to 100 because of rounding. The percentage of missing cases is shown for each measure for reference.

Programs With Child Assessments

The study team collected child assessment data from 132 sites from among those serving preschool aged children, including 113 centers and 19 FCCHs. The study team mailed packets of parent consent forms for sampled classrooms to site directors. Directors distributed consent forms to families and returned them to the study team once they were completed. Drawing from the pool of children who were age-eligible and whose parents consented, the study team selected a sample of children for the direct child assessments. Up to 11 children between the ages of three and five were sampled from selected classrooms within participating sites. If fewer than 11 preschool children were enrolled or consented to participate in the study, all children who consented were included in the study.

As shown in exhibit 1A.3, 80 percent of sites in the child assessment sample received one or more types of standards-based public funding, such as First 5's Child Signature Program, Title 5 funding, or federal Head Start funding. Staff at 80 percent of the sites also speak Spanish or another non-English language with the children. Seventy-nine percent of the sites received a tier rating of 4 or 5. Average enrollment was 54 children in the centers and 9 children in the FCCHs.

A total of 1828 children were assessed in these sites during the fall data collection wave, and 1,625 of the children were assessed in the spring. Of these, 1,611 were assessed at both time points. Exhibit 1A.8 describes the sample of 1,611 children with complete data that were included in the analyses. The child sample was evenly divided between boys and girls. Sixty-five percent of the children spoke Spanish at home, either alone or in combination with English. Nine percent had an identified disability.

Exhibit 1A.8. Characteristics of Children Included in Analysis Sample

	Children With Child Assessment Data
Child Characteristics	**Percentage**
Gender	
Male	0.50
Female	0.50
Home language	
English	0.30
Spanish	0.35
Spanish and English	0.30
Other	0.06
Child has identified disability	0.09
	Mean (SD)
Child age at time of fall assessment	4.26 (0.49)

NOTE: N=1,611 children; SD=standard deviation

Overall Challenges Associated With Recruitment and Gaining Sites' Participation Agreements

Two main challenges limited our ability to recruit the number of sites that we estimated were necessary for our planned analyses: (1) fewer sites than anticipated had full ratings; and (2) the short timeline in the first year, compounded by delays caused by concerns about the study expressed by Consortia, made recruiting sites and completing data collection prior to the end of the program year a further challenge.

First, based on information gathered from the *Local Quality Improvement Efforts and Outcomes Descriptive Study* (AIR and RAND 2013), we anticipated that there would be more than 1,000 rated sites from which to draw a sample for inclusion in the study. We learned at the initial meeting with the implementation team that not all sites had "full" ratings. That is, some sites had not had the opportunity to receive their CLASS or ERS observation and were assigned a temporary "provisional" rating. Once we collected the data from all of the Consortia and removed the provisionally rated sites, we found that there were only 472 sites with full ratings. This meant that it would not be possible to obtain the sample size originally planned.

Second, after the initial webinar for the Consortia, several Consortia expressed concerns about the design of the study. Questions were raised about the feasibility of conducting the study and the appropriateness of evaluating so early in the implementation of the RTT-ELC QRIS. In addition, several Consortia raised concerns about the burden placed on sites by the study. In particular, the Consortia were concerned about the number of classroom observations that the study would be conducting on top of the multiple observations that sites were already receiving.

Several Consortia preferred that we wait until their concerns had been addressed before we invited sites in their counties to participate in the study. We worked with the California Department of Education (CDE) to develop a plan for accepting some extant data in lieu of conducting additional classroom observations in sites that had recent Consortia-conducted observations. This plan reduced the burden on these sites. Unfortunately, this process also caused a significant delay in conducting the initial recruitment, which, in turn, inhibited our ability to get sites on board in time to collect all the data (that is, the program or school year ended before we were able to collect data in some programs). Response rates also varied by Consortia and suggest that the fact that several Consortia were apprehensive about the study may have filtered down to the sites and reduced buy-in for the study, limiting our ability to collect participation agreements.

Statistical Power

In our study planning phase, we conducted statistical power analysis to determine sample sizes for two key study analyses: those examining the relationship between QRIS ratings and scores on independent classroom observations, and those examining the relationship between QRIS ratings and child outcomes. Statistical power analysis is a method of calculating the minimum sample size needed to conduct meaningful statistical analyses when comparing group differences (such as differences between programs at each QRIS rating level). The goal of statistical power analysis is to ensure that a study is appropriately designed to answer the research questions and to control study expenses by selecting only the number of programs needed for the analyses.

In study planning, we estimated that the analyses examining the relationship between QRIS ratings and scores on independent classroom observations would require a sample size of 350 programs to detect differences between groups that are small to medium in size (*f* effect sizes of 0.17 to 0.19) and that analyses using 150 programs would permit us to detect differences that are medium to large in magnitude (*f* effect sizes of 0.26 to 0.29). We estimated that the analyses examining the relationship between QRIS ratings and child outcomes would require a sample size of 1,200 children in 150 centers with pre and post assessments to detect differences of a relatively small magnitude as would be expected in comparing levels of QRIS ratings (Cohen's *d* effect sizes of .20). To calculate these sample size estimates, we used power criteria of 0.80, which means that the analysis has an 80 percent chance of correctly rejecting the null hypothesis when it is false. Power of 0.80 is widely considered to be an acceptable level.

As described previously, the number of programs that received complete CLASS or PQA observations (175) was lower than expected for the analyses examining the relationship between QRIS ratings and scores on independent classroom observations – so we are only able to detect differences that are medium to large in magnitude. Furthermore, because of the small number of FCCHs that participated in the study, these analyses only included centers. Analyses could not combine data on centers and FCCHs because the QRIS ratings are calculated differently for each program type and do not represent the same measure of quality. Complete CLASS scores are available for 139 centers, and retrospective power analyses find that the adjusted power for the analysis of variance (ANOVA) analyses with the CLASS total scores is 0.58, lower than the desired level of 0.80, to detect small differences. Complete PQA Form A scores are available for 140 centers, and retrospective power analyses find that the adjusted power for the ANOVA analyses with the PQA Form A total scores is 0.35, also lower than desired. The low power estimates indicate that some study analyses have sample sizes too small to detect small

differences between QRIS rating levels. In other words, some analyses might miss potentially significant differences that would be detected with a larger sample size. This does not mean that the analysis results are incorrect, but it does indicate that the analyses that find no significant differences are not conclusive in their findings. Analyses that do find significant differences are not affected by the low power estimates.

The small number of programs with classroom observation data also limits our ability to detect statistically significant small relationships between quality improvement activities and classroom quality outcomes. The analyses with centers only included 147 teachers in 98 centers, and those including both centers and FCCHs included 161 teachers in 112 programs. These sample sizes are very small for regression analysis, particularly given the nested nature of the data with teachers nested within programs.

We exceeded the target number of completed child assessments (1200 children) by completing more than 1600 assessments at two points in time. Thus the analyses of children's outcomes have sufficient power to detect relatively small differences as might be expected in comparing levels of QRIS ratings (Cohen's *d* effect sizes of .20).

The sample of 472 programs with complete California QRIS ratings and the subsamples of 365 centers and 107 FCCHs were adequate for all descriptive, predictive, and comparative analyses conducted using those data.

Measures

The quality and outcomes study draws on four primary sources of data: the extant data provided by the Consortia (the "Common Data Elements") for 2013 and for 2014, classroom observations conducted primarily by the study team in both the 2013–14 and 2014–15 program years, direct child assessments conducted by the study team in fall 2014 and spring 2015, and online staff surveys completed by teachers and directors in spring 2015. The study also draws on qualitative data collected from QRIS administrators, providers, and parents through interviews and focus groups. Descriptions of these sources and their measures follow.

Existing State Data on Programs Participating in California's QRIS

For the study analyses, AIR collected extant data on the program characteristics and QRIS ratings of programs participating in the QRIS as of January 2014. Each of the 17 Consortia in the state collected data on its local participating programs separately, using different procedures and database systems but following specific statewide requirements for QRIS reporting. The data submitted to the state using the QRIS reporting requirements are referred to as the Common Data Elements and include data on program type, enrollment, funding sources, languages spoken in the program, element scores, the total of the element scores, the QRIS rating, and the program average CLASS scores used to calculate the CLASS element scores. In addition, as noted previously, six Consortia also provided some classroom-level CLASS and ERS data to supplement the sample for the analyses linking tier ratings to observed quality.

California's QRIS permits participating Consortia to make local adaptations to the QRIS rating criteria for Tiers 2 and 5. To ensure comparability of the QRIS ratings for the study analyses

further, AIR used the element score data for each program to simulate QRIS ratings for programs in all Consortia using the California QRIS rating criteria without local adaptations, to the extent possible. In most cases, Consortia used the same criteria for element scores, but two of the Consortia added unique local criteria to the California QRIS criteria for element scores and could not provide raw data to determine element scores without the local criteria. In those two counties, the simulated California QRIS ratings are not perfectly comparable to other counties.

Classroom Observation Measures

To measure classroom quality, we conducted observations within the settings using seven different data collection protocols:

1. The CLASS Pre-K (Pianta, La Paro, and Hamre 2008)—used in all sampled classrooms where the majority of children were preschool-age.

2. The CLASS Toddler (La Paro, Hamre, and Pianta 2012)—used in all sampled classrooms where the majority of children were toddlers.

3. The Pre-K PQA (HighScope Educational Research Foundation 2003)—used in all sampled classrooms where the majority of children were preschool age.

4. The Infant-Toddler PQA (Hohmann, Lockhart, and Montie 2013)—used in all sampled classrooms where the majority of children were infants or toddlers.

5. The Family Child Care PQA (HighScope Educational Research Foundation 2009)— used in all sampled FCCHs.

A description of each measure follows.

The CLASS

The CLASS was developed by the Center for Advanced Study in Teaching and Learning at the University of Virginia and has been used widely for research and professional development purposes. The CLASS Pre-K organizes teacher and student interactions into three broad domains: Emotional Support, Classroom Organization, and Instructional Support, which are further subdivided into 10 dimensions that describe the complex classroom environment, as shown in exhibit 1A.9.

Research suggests that for healthy social-emotional development, children need to feel safe with their caregiver or educator and in their early education and care environment. CLASS examines how teachers interact with children to create warm relationships and a positive climate in the classroom. CLASS also looks at how teachers interact with their students to promote cognitive development—for example, how they foster higher-level thinking (Pianta, La Paro, and Hamre 2008).

The internal consistency of CLASS Pre-K dimension scores across four cycles ranges from 0.79 for Instructional Learning Formats to 0.90 for Teacher Sensitivity. Internal consistency is somewhat higher among the dimensions in the Emotional Support domain than among the

dimensions in either the Classroom Organization or Instructional Support domains. The CLASS Pre-K also has sound validity. It was evaluated during a 10-year period as part of the National Center for Early Development and Learning (NCEDL) Multi-State Study of Prekindergarten and Study of State-Wide Early Education Programs (SWEEP) and the National Institute of Child Health and Human Development (NICHD) Study of Early Child Care and Youth Development. Together, these studies conducted observations in more than 3,000 early childhood classrooms and found that children in classes with higher CLASS scores go on to make higher academic and social gains than children in classrooms with lower CLASS scores. CLASS also was found to be valid at different ages (Pianta, La Paro, and Hamre 2008) and correlated with other measures of classroom quality.

Exhibit 1A.9. Description of CLASS Pre-K Domains and Dimensions

Domain	Dimensions
Emotional Support	**Positive Climate.** Positive Climate reflects the emotional connection between the teacher and students and among students, and the warmth, respect, and enjoyment communicated by verbal and nonverbal interactions.
	Negative Climate. Negative Climate reflects the overall level of expressed negativity in the classroom; the frequency, quality, and intensity of teacher and peer negativity are key to this scale.
	Teacher Sensitivity. Teacher Sensitivity encompasses the teacher's awareness of and responsiveness to students' academic and emotional needs; high levels of sensitivity facilitate students' ability to actively explore and learn because the teacher consistently provides comfort, reassurance, and encouragement.
	Regard for Student Perspectives. Regard for Student Perspectives captures the degree to which the teacher's interactions with students and classroom activities place an emphasis on students' interests, motivations, and points of view, and encourage student responsibility and autonomy.
Classroom Organization	**Behavior Management.** Behavior Management encompasses the teacher's ability to provide clear behavioral expectations and use effective methods to prevent and redirect misbehavior.
	Productivity. Productivity considers how well the teacher manages instructional time and routines and provides activities for students so that they have the opportunity to be involved in learning activities.
	Instructional Learning Formats. Instructional Learning Formats focus on the ways in which the teacher maximizes students' interest, engagement, and ability to learn from lessons and activities.
Instructional Support	**Concept Development.** Concept Development measures the teacher's use of instructional discussions and activities to promote students' higher-order thinking skills and cognition, and the teacher's focus on understanding rather than on rote instruction.
	Quality of Feedback. Quality of Feedback assesses the degree to which the teacher provides feedback that expands learning and understanding and encourages continued participation.
	Language Modeling. Language Modeling captures the quality and amount of the teacher's use of language-stimulation and language-facilitation techniques.

Source: CLASS Manual, Pre-K (Pianta, La Paro, and Hamre 2008).

The CLASS Toddler tool was adapted from the CLASS Pre-K tool and also incorporates best practices for toddler development from the literature (La Paro, Hamre, and Pianta 2012). The CLASS Toddler organizes teacher and student interactions into two broad domains: Emotional and Behavioral Support and Engaged Support for Learning, which are further subdivided into eight dimensions that describe the complex classroom environment, as shown in exhibit 1A.10. The CLASS Toddler has been used in some pilot studies, and the authors currently are in the process of conducting further validation work on the tool.

Exhibit 1A.10. Descriptions of CLASS Toddler Domains and Dimensions

Domain	Dimensions
Emotional and Behavioral Support	**Positive Climate.** Positive Climate reflects the connection between the teacher and children and the warmth, respect, and enjoyment communicated by verbal and nonverbal interactions.
	Negative Climate. Negative Climate reflects the overall level of expressed negativity in the classroom. The frequency, quality, and intensity of teacher and child negativity are the key to this scale.
	Teacher Sensitivity. Teacher Sensitivity encompasses the teacher's responsiveness of children's individual needs and emotional functioning. The extent to which the teacher is available as a secure base (being there to provide comfort, reassurance, and encouragement) is included in this rating.
	Regard for Child Perspectives. Regard for Child Perspectives captures the degree to which the teacher's interactions with children and classroom activities emphasize children's interests, motivations, and points of view and encourage children's responsibility and independence.
	Behavior Guidance. Behavior Guidance encompasses the teacher's ability to promote behavioral self-regulation in children by using proactive approaches, supporting positive behavior, and guiding and minimizing problem behavior.
Engaged Support for Learning	**Facilitation of Learning and Development.** Facilitation of Learning and Development considers how well the teacher facilitates activities to support children's learning and developmental opportunities. How the teacher connects and integrates learning into activities and tasks should be included in this rating.
	Quality of Feedback. Quality of Feedback assesses the degree to which the teacher provides feedback (in response to what children say and/or do) that promotes learning and understanding and expands children's participation.
	Language Modeling. Language Modeling captures the quality and amount of the teacher's use of language-stimulation and language-facilitation techniques to encourage children's language development.

Source: CLASS Manual, Toddler (La Paro, Hamre, and Pianta 2012).

The PQA

The PQA is a rating instrument designed to evaluate the quality of early childhood programs and identify staff training needs. The three versions of the PQA were developed by HighScope Educational Research Foundation. The measures identify the structural characteristics and dynamic relationships that effectively promote the development of young children, encourage involvement of families and communities, and create supportive working environments for staff.

The PQA examines multiple dimensions of program implementation, from the physical characteristics of the setting to the nature of adult-child interaction to program staffing and management.

The Preschool PQA measures seven areas of program quality: learning environment, daily routine, adult-child interaction, curriculum planning and assessment, parent involvement and family services, staff qualifications and development, and program management. Observers rate a number of items for each of the seven areas based on observation and answers to interview questions. More details on the items in the Preschool PQA are included in exhibit 1A.11.

The Preschool PQA has been used extensively as a research tool by trained independent raters in more than 800 preschool classrooms and child care centers. The authors report a high level of internal consistency and evidence of validity for the overall measure. The authors report that the Preschool PQA is significantly correlated with other measures of program quality and child outcomes, such as the ECERS and the Caregiver Interaction Scale. The national Training for Quality study also showed that the PQA total score and all the subscales were positively and significantly associated with construct measures on the language scale of the Developmental Indicators for the Assessment of Learning Revised (DIAL-R).

The Infant-Toddler PQA was developed for use in center-based classrooms serving children aged 0–36 months. The instrument measures seven domains of curriculum implementation and program operations in child care settings: Learning Environment; Schedules and Routines; Adult-Child Interaction; Curriculum Planning and Child Observation; Parent Involvement and Family Services; Staff Qualifications and Staff Development; and Program Management. More details on the items in each domain of the Infant-Toddler PQA are included in exhibit 1A.12. The agency items or sections V–VII are the same as on the Preschool PQA and are only measured once if a center has both preschool and infant-toddler classrooms.

Exhibit 1A.11. Preschool PQA Sections and Items

Section	Item	
I. Learning Environment	■ Safe and healthy environment ■ Defined interest areas ■ Logically located interest areas ■ Outdoor space, equipment, materials ■ Organization and labeling of materials	■ Varied and open-ended materials ■ Plentiful materials ■ Diversity-related materials ■ Displays of child-initiated work
II. Daily Routine	■ Consistent daily routine ■ Parts of the day ■ Appropriate time for each part of day ■ Time for child planning ■ Time for child-initiated activities ■ Time for child recall	■ Small-group time ■ Large-group time ■ Choices during transition times ■ Cleanup time with reasonable choices ■ Snack or meal time ■ Outside time
III. Adult-Child Interaction	■ Meeting basic physical needs ■ Handling separation from home ■ Warm and caring atmosphere ■ Support for child communication ■ Support for non-English speakers ■ Adults as partners in play ■ Encouragement of child initiatives	■ Support for child learning at group times ■ Opportunities for child exploration ■ Acknowledgment of child efforts ■ Encouragement of peer interactions ■ Independent problem solving ■ Conflict resolution
IV. Curriculum Planning and Assessment	■ Curriculum model ■ Team teaching ■ Comprehensive child records	■ Anecdotal note taking by staff ■ Use of child observation measure
V. Parent Involvement and Family Services	■ Opportunities for involvement ■ Parents on policy-making committees ■ Parent participation in child activities ■ Sharing of curriculum information ■ Staff-parent informal interactions	■ Extending learning at home ■ Formal meetings with parents ■ Diagnostic/special education services ■ Service referrals as needed ■ Transition to kindergarten
VI. Staff Qualifications and Staff Development	■ Program director background ■ Instructional staff background ■ Support staff orientation and supervision ■ Ongoing professional development	■ Inservice training content and methods ■ Observation and feedback ■ Professional organization affiliation
VII. Program Management	■ Program licensed ■ Continuity in instructional staff ■ Program assessment ■ Recruitment and enrollment plan	■ Operating policies and procedures ■ Accessibility for those with disabilities ■ Adequacy of program funding

Exhibit 1A.12. Infant-Toddler PQA Domains and Items

Section	Item	
I. Learning Environment	■ Safe and healthy environment ■ Spaces for sleeping, eating, and bodily care ■ Spaces for play and movement	■ Accessible sensory materials ■ Children's photos, creations ■ Accessible, safe, outdoor space
II. Schedules and Routines	■ Flexible, predictable schedule ■ Comfortable arrivals/departures ■ Child-initiated choice times ■ Bodily care choices ■ Smooth transitions	■ Child-centered feedings/meals ■ Fluid, dynamic group times ■ Nature-based outside times ■ Individualized naptimes
III. Adult-Child Interaction	■ Long-term adult-child relationships ■ Child-adult trust ■ Child-adult partnerships	■ Children's intentions ■ Children's social relationships ■ Children's conflict resolution
IV. Curriculum Planning and Child Observation	■ Comprehensive curriculum ■ Child observation and planning ■ Assessing developmental progress	■ Individualized planning by caregivers
V. Parent Involvement and Family Services	■ Opportunities for involvement ■ Parents on policy-making committees ■ Parent participation in child activities ■ Sharing of curriculum information ■ Staff-parent informal interactions	■ Extending learning at home ■ Formal meetings with parents ■ Diagnostic/special education services ■ Service referrals as needed ■ Transition to kindergarten
VI. Staff Qualifications and Staff Development	■ Program director background ■ Instructional staff background ■ Support staff orientation and supervision ■ Ongoing professional development	■ Inservice training content and methods ■ Observation and feedback ■ Professional organization affiliation
VII. Program Management	■ Program licensed ■ Continuity in instructional staff ■ Program assessment ■ Recruitment and enrollment plan	■ Operating policies and procedures ■ Accessibility for those with disabilities ■ Adequacy of program funding

The Family Child Care PQA measures four domains of quality for family child care programs: Daily Schedule, Learning Environment, Provider-Child Interaction, and Safe and Healthy Environment. More details on the items included in each domain are presented in exhibit 1A.13.

Exhibit 1A.13. Family Child Care PQA Domains and Items

Section	Item	
I. Daily Schedule	■ Consistent daily schedule ■ Child-initiated activities ■ Adult-initiated group activities ■ Cleanup time with choices	■ Snacks or meals ■ Outside play ■ Nap, rest, or quiet time ■ Child planning
II. Learning Environment	■ Space for play ■ Logically arranged interest areas, with easy access ■ Outside space with equipment and materials ■ Materials are systematically stored and labeled ■ Materials are accessible to children	■ Materials are varied, manipulative, open ended, and appeal to multiple senses ■ Materials are plentiful ■ Materials reflect human diversity and the positive aspects of children's lives ■ Adult and child work is on display
III. Provider-Child Interaction	■ Supportive arrivals and departures ■ Warm and caring atmosphere ■ Encouragement and support for child language, verbal and nonverbal ■ Support for non-English speakers ■ Adults participate as partners in play ■ Support for child learning during group activities ■ Opportunities for child exploration at own pace	■ Acknowledgement of child efforts ■ Encouragement of peer interactions ■ Opportunities for self-help and solving problems with materials ■ Encouragement of conflict resolution ■ Use of television and computers
IV. Safe and Healthy Environment	■ Spaces are free of physical hazards ■ Healthy hand-washing routines are in place ■ Safe and healthy toileting and diapering routines are in place ■ Food preparation practices are healthy and safe	■ Resting/napping equipment and routines are safe ■ Animals and pets are healthy ■ Emergency equipment and procedures are in place

Observation Data Collection Procedures

In spring 2014 (April through June) all programs were observed using the PQA and CLASS. Observation data collected by the study team were supplemented by data provided by a few Consortia in order to reduce the burden on sites. In total, data were collected from a total of 495 observations (281 CLASS and 214 PQA) were conducted in spring 2014, and 232 CLASS observations were conducted in spring 2015. All observers were trained and certified as reliable through Teachstone (for CLASS) or by HighScope (for PQA) before conducting observations.

Scheduling and conducting the observations prior to the end of the program year was a data collection challenge in 2014. As much as possible, we tried to complete observations of all sampled classrooms prior to when programs closed before summer break. In some cases, this meant we were conducting observations in classrooms in less than ideal circumstances (for example, the teacher had begun to pack up her classroom in preparation for the program closing in the coming days). In other cases, this meant we were unable to complete observations in all sampled classrooms at a particular site.

Direct Child Assessment Measures

To measure child outcomes, we conducted one-on-one direct child assessments within the settings using five child assessment measures:

1. preLAS (DeAvila and Duncan 2000)—used to screen children to determine whether they were sufficiently proficient in English to be assessed in English.

2. Woodcock Johnson III: Letter-Word Identification and Applied Problems subtests (Woodcock, McGrew, and Mather 2001)—used to assess children's early literacy and early mathematics competencies. Only children who passed the preLAS were assessed using these measures.

3. Woodcock Munos Bateria: Problemas Aplicados and Identificacion de letres y palabras subtests (Woodcock, McGrew, and Mather 2001)—used to assess children's early literacy and early mathematics competencies for all children whose parents indicated that they had Spanish as a home language.

4. Story and Print Concepts (Zill and Resnik 2000)—used to assess children's early literacy competencies. Children who did not pass the preLAS were administered the Story and Print Concepts in Spanish.

5. Peg Tapping task (Diamond and Taylor 1996)—used to assess children's executive function skills. Children who did not pass the preLAS were administered the Peg Tapping task in Spanish.

A description of each measure follows.

The preLAS

The receptive and expressive language subtests of the preLAS 2000 (De Avila and Duncan 2000), "Simon Says" and Art Show subtests, were used to assess English proficiency, and therefore determine students' eligibility for further assessment and the primary language for administration of the assessments. According to Reaney and Kruger (2002), the test-retest reliability coefficient for these subtests is high, with a score of .89 or higher.

The Woodcock Johnson III: Letter-Word Identification and Applied Problems Subtests

Letter-Word Identification Subtest. This subtest measures the child's word identification skills. The initial items require the child to identify letters that appear in large type on the subject's side

of the test book, and the remaining items require the child to pronounce or read words correctly aloud. The child is not required to know the meaning of any word. The items become increasingly difficult as the selected words appear less and less frequently in written English. Letter-Word Identification has a median reliability of .91 in the age 5 to 19 range (Woodcock, McGrew, Schrank, and Mather 2007).

Applied Problems Subtest. This subtest requires the child to analyze and solve math problems. To solve the problems, the child must listen to the problem, recognize the procedure to be followed, and then perform calculations. Because some of the problems include extraneous information, the child must decide not only the appropriate mathematical operations to use but also which numbers to include in the calculation. Item difficulty increases with more complex calculations. This subtest has a median reliability of .92 in the age 5 to 19 range (Mather, Schrank, and Woodcock 2007).

Story and Print Concepts

The Story and Print Concepts task was an adaptation of the Story and Print Concepts Version 1 FACES 2000 (Zill & Resnik 2000) that was an adaptation of earlier prereading assessment procedures developed by Marie Clay (1979) and Mason and Stewart (1989). In these procedures, a child is handed a children's storybook (California QRIS Battery—*Are You My Mother?* (Eastman, 1960) or *Eres mi Mama?* (Eastman and Marquez, Trans. 2001)) upside down and backwards. The assessor asks a series of questions designed to test the child's knowledge of books. These include questions regarding the location of the front of the book, the point at which one should begin reading, and information relating to the title and author of the book. The assessor reads the story to the child and asks basic questions about both the mechanics (print conventions) of reading and the content (comprehension) of the story. The print convention questions pertain to children's knowledge of the left-to-right and up-and-down conventions of reading, while the comprehension questions pertain to children's recall of key facts from the story. The FACES reliabilities were as follows: Book Knowledge (.57–.61); Print Conventions (.73-–84); and Comprehension (.40-–43). The FACES reliabilities for the Spanish version of these measures were as follows: Book Knowledge (.43), Print Conventions (.59), and Comprehension (.39) (Zill and others 2006).

Peg Tapping Task

To assess children's executive function skills or cognitive inhibitory control, we used the Peg Tapping task (Diamond and Taylor 1996; Smith-Donald, Raver, Hayes, and Richardson 2007). The child was asked to tap twice if the assessor tapped once and tap once if the assessor tapped twice. Assessors first administered a set of practice trials to ensure that children understood the rules of the task. Children were then administered 16 total trials. The task measures children's cognitive inhibitory control and, to a lesser degree, working memory and fine motor activity. Scores recorded the correct number of trials out of 16 that children achieved. Because of concern that tapping a pencil (as originally used for this task) could prove difficult for three- and four-year-old children and might conflate cognitive inhibitory control with fine motor skills, we substituted larger wooden pegs for pencils in this task.

Woodcock Muñoz Batería: Problemas aplicados and Identificación de letres y palabras

The Woodcock Muñoz Batería is the Spanish version of the Woodcock Johnson III. Identificación de letres y palabras has a median reliability of .91 in the age 5 to 19 range and problemas aplicados has a median reliability of .92 in the age 5 to 19 range (Mather and Woodcock, translated by Wolfson 2005).

Direct Child Assessment Data Collection Procedures

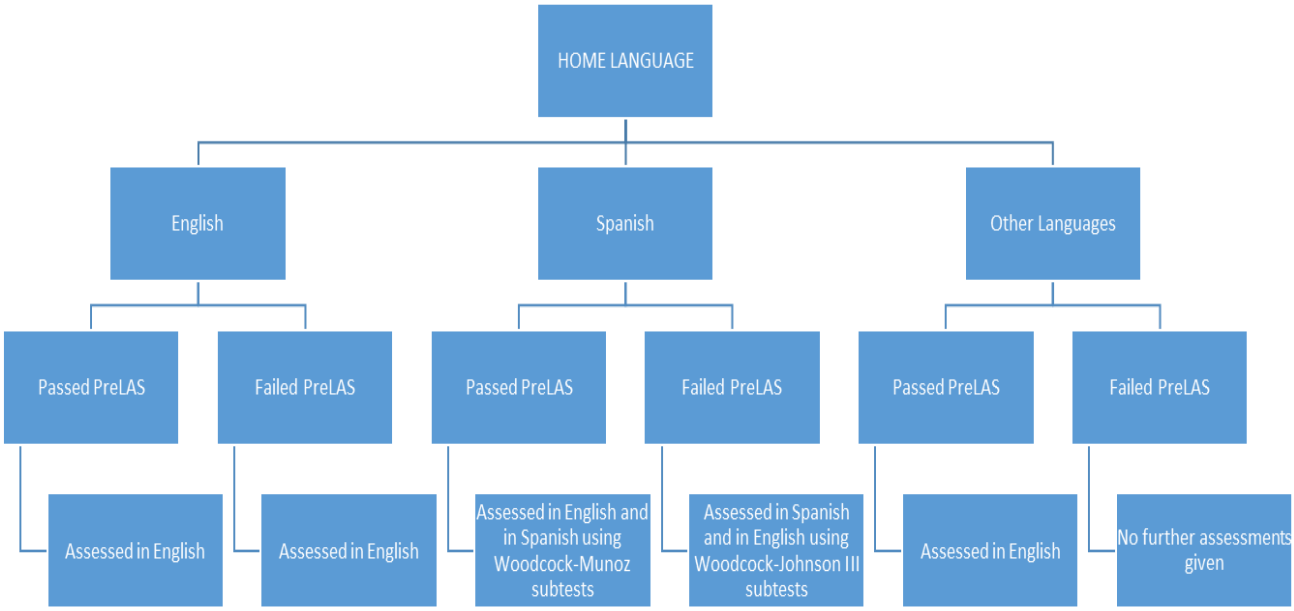
In fall 2014 a total of 1828 children in 132 programs were assessed. A total of 1,611 of these children were assessed again in spring 2015. Assessors were screened, trained, and certified as reliable on all measures before administering the assessments to study participants. To schedule the assessment sessions, the study team reached out to the site contact to discuss data collection needs and expectations at their site and set a time for the sessions.

On-site, assessors asked site staff to clearly identify children listed on the child assessment roster and pull children one at a time for the assessment. Children were asked to give their assent to participate. If a child refused participation in the assessment, assessors did not assess the child unless the child later volunteered independently.

Child Assessment Routing Procedures

All children were screened for English proficiency using the preLAS, Simon Says and Art Show subtests. Children were then given the remainder of the assessment battery based on their home language and score on the preLAS. Children whose reported home language was English were administered the full battery of assessments in English (that is, the Woodcock Johnson III: Letter-Word Identification subtest, Story and Print Concepts, Peg Tapping task, and Woodcock-Johnson III: Applied Problems subtest). For children whose home language was reported as Spanish, if they passed the preLAS (scored 12 or more points), they were administered the full assessment in English, as well as the Woodcock-Muñoz Problemas Aplicados and Identificación de letres y palabras (in Spanish). If they did not pass the preLAS (scored fewer than 12 points), they were administered the full assessment in Spanish as well as the Woodcock-Johnson III: Letter-Word Identification and Applied Problems subtests in English. For children whose home language was reported as something other than English or Spanish (such as Russian or Japanese), if they passed the preLAS, they were administered the full assessment in English; if they did not pass the preLAS, no further assessments were given. Exhibit 1A.14 provides a pictorial description of how children were routed through the different components of the assessment.

Exhibit 1A.14. Child Direct Assessment Routing



A total of 32 staff were trained to conduct child assessments in fall 2014. The training for fall 2014 consisted of three full days, where assessors learned about the assessments and had opportunities to practice before beginning the certification process on the second day of the training. In order to be certified, each assessor needed to complete a full English assessment, the Woodcock-Johnson subtests in Spanish with an adult playing the child, and two to three measures with a child. During the certification process, each assessor was observed by a certifier. The certifiers were staff that had been previously trained on the assessments in order to certify assessors. To pass certification, an assessor needed to reliably conduct the assessment and obtain at least a score of 85 percent on the scoring rubric for each of the instruments included in the assessment. If assessors failed to achieve 85 percent correct on one instrument, they were required to practice and then recertify on that instrument. However, if assessors failed to achieve 85 percent on more than one instrument, they were required to recertify on the entire assessment (that is, demonstrate the full assessment again, including the instruments they passed the first time). The scoring rubrics for the instruments included items related to correctly administering and scoring the instruments, as well as items related to the pace of administration, type of encouragement or praise the assessor provided, if the assessor went off-script, and how well the assessor was able to build rapport with the child. In addition, because there was a lag in time between training and when assessors actually began collecting data for the fall 2014, assessors were required to complete refresher activities prior to conducting their first assessment. These activities included watching a video of a full English assessment and pointing out the correct number of administration errors on the video, conducting a practice assessment with a child, and conducting a virtual practice assessment with a certifier. Assessors were given a refresher training for spring 2015 and recertified before data collection resumed.

Online Staff and Director Surveys

We administered several online surveys during the 2014-15 program year. One survey was administered to center and family child care (FCCH) teaching staff at two points in time: fall 2014 and spring 2015. An additional survey, tailored for site-level center directors, was fielded in spring 2015. Also in spring 2015, a combined staff and director survey was administered to FCCH lead teachers in an effort to capture their experiences as both teachers and directors. Below, we discuss the development and administration of each survey.

Staff Survey

We developed the staff survey with input from the CDE and key Consortia representatives. We invited lead and assistant teachers from centers and FCCHs who were *not* included in our sample to review a survey draft and participate in a cognitive interview over the phone. After cognitive interviews were completed (seven in total), the survey was revised to address any feedback or concerns regarding wording of particular questions.

The final survey was translated into Spanish, and both Spanish and English surveys were programmed into online versions using Select Survey. We reviewed the surveys for language or skip pattern errors, made any necessary adjustments, and then invited lead and assistant teachers from centers and FCCHs not in our sample to pilot the online version and test how long respondents took to complete the survey. Pilot testers' responses (13 in total) were reviewed for discrepancies or errors and, as needed, we followed up with pilot teachers over the phone to better understand why they responded in the way they did. We used this input to finalize the online programming.

The staff survey was intended to capture information regarding staff participation in QI activities over a 10-month period: June 2014–March 2015. In an effort to ease cognitive burden, we administered the staff survey at two points in time: fall 2014 and spring 2015. The fall 2014 staff survey asked staff to reflect on the time period from June 2014 through September 2014. We then developed two versions of the spring 2015 staff survey: a short version for the staff who responded to the fall 2014 survey and a long version for the staff who did *not* respond to the fall 2014 survey. The short version asked staff to reflect on the time period from October 2014 through March 2015, while the long version asked questions regarding the full 10-month period (June 2014–March 2015). This ensured that we received complete information from each respondent.

Once the survey and sample were finalized, e-mail invitations (with both English and Spanish text) were sent to all teachers in the survey sample for whom we had e-mail addresses. A total of 543 staff received the spring 2015 survey invitation with a link to the survey. After the initial e-mail invitation was sent, staff received periodic follow-up reminders to complete the survey. In 2015, most follow-up was done in person by SRM team members. SRM staff hand-delivered hard-copy invitation letters to each staff member around the time of survey launch, and then followed up with nonrespondents throughout the survey window. As needed, SRM staff also distributed a paper version of the survey to staff who were unable or unwilling to complete the survey online. These paper surveys were then mailed to RAND, where staff entered the data

manually into the online format. The fall staff survey was open from November 2014 through January 2015, and the spring staff survey was open April through June 2015.

For the fall 2014 survey, survey respondents received an incentive in the form of a $20 Amazon gift card code. For the spring 2015 survey, *all* staff in the survey sample were provided upfront with a preincentive of a $20 Amazon gift card code. Staff received codes in the initial invitation letters distributed by SRM and also after their survey responses were submitted. For nine sites in one Consortium, due to an agency policy that did not allow for gift card incentives, staff received children's books for their classroom rather than the standard Amazon gift card. This was true for both the fall and spring survey administrations.

Center Director and FCCH Lead Teacher Surveys

The director survey development process mirrored that for the staff survey. We incorporated input from CDE and the Consortia workgroup to identify questions regarding QI activities that site directors would be best suited to answer. A draft of the survey was shared with five directors not in our sample, who then participated in cognitive interviews. Once the director questions were finalized, two versions of the director survey were created: one for center directors and one for FCCH lead teachers. The latter combined the director survey questions applicable to FCCHs with staff survey questions (either long or short, depending on whether the FCCH lead teacher had taken the fall 2014 staff survey). There also were some survey questions that were designated as center-only, which were not included in the FCCH version.

The center director survey was made available in English only, but FCCH lead teachers had the choice to take the survey in English or Spanish. The center director and FCCH lead teacher surveys were programmed online, tested internally, and finalized for administration.

A total of 117 centers and 25 FCCH sites are included in our sample. FCCH lead teachers and center directors received their unique survey links via an initial e-mail invitation as well as a hard-copy letter that was hand-delivered by SRM staff. SRM staff also followed up with nonresponding directors throughout the survey window. The only exceptions to this process were administrators who were contacts for multiple centers (described further in the Sample section below) because we needed to ensure that we got survey responses for each individual site. We sent directors responsible for overseeing two centers an invitation e-mail with two unique links—one for each of their sites. For directors overseeing three or more sites, we requested that they fill out a single survey but that they only respond to questions with answers that applied across all of their sites. A RAND staff member then followed up with those directors over the phone to collect question responses that varied across sites and manually input those answers into the online survey that corresponded with each individual site. The center director and FCCH lead teacher surveys were open from May through June 2015.

Center directors received a $20 Amazon gift card preincentive for each site for which they responded. FCCH lead teachers, due to the fact that they were responding to both staff and director questions in one survey, received a $40 Amazon gift card preincentive.

Cost Survey

In an effort to understand the full economic cost of implementing various QI strategies in the 11 Consortia, we developed the QI Activity Cost Survey to collect information on direct and indirect costs associated with planning, administering, and delivering QI strategies. The QI Activity Cost Survey was developed with input from Consortia staff in each QRIS most knowledgeable about financial matters. Before developing the survey, we conducted a set of cognitive interviews with representatives from ten of the 11 Consortia, typically the executive director and financial officer. These semi-structured discussions were scheduled for 45 minutes and included questions on the Consortia's expenditure reporting processes; level of QI reporting (i.e. agency wide, department, QI initiative); and availability of information on staff allocation for management and implementation of QI initiatives, personnel costs to support those initiatives (i.e. salaries, non-wage benefits), QI financial supports (e.g., grants, scholarships, or other direct financial incentives), non-personnel costs (i.e. equipment, supplies, buildings), contracts with outside providers supporting QI initiatives, and overhead cost (i.e. administrative costs, occupancy costs). After cognitive interviews were completed, we developed the cost survey instrument incorporating the information gathered in the preliminary discussions with Consortia representatives.

The cost survey instrument was designed to collect comprehensive information for the most recent fiscal year with complete data on QI-related expenditures and outputs. The instrument was structured to collect expenditure and activity levels separately for each major QI strategy: coaching/ mentoring, credit bearing courses, non-credit bearing courses, peer support activities, and financial incentives. In the cost survey instrument, QI strategy definitions were provided, as were detailed instructions for each of the different types of cash outlays and in-kind contributions.

For each QI strategy, the survey asked for expenditures and in-kind supports incurred to support the QI strategy in the following expenditure domains: in-house personnel, materials and supplies, buildings and facilities, contracts, and direct and indirect costs. For the expenditure information, the survey allowed respondents to provide detailed expenses disaggregated by QI strategy or, when that was not feasible, to provide aggregate expenditures with an indication as to the share for each QI strategy (where the shares summed to 100 percent). If in-house personnel expenditures could not be easily broken out by QI strategy, the survey provided an option for respondents to derive a total by entering an estimate for time spent on each QI activity and salary and benefit estimates for each personnel. If actual expenditure data was not available, we asked Consortia for budgeted estimates and followed-up individually to see how closely those figures reflected actual costs incurred during the fiscal year. When aggregate expenditures were not easily identified with a specific QI strategy, we worked with Consortia staff to determine an approximate allocation of expenditures across each QI strategy and applied those shares to the expenditure components without clear disaggregation.

The survey also asked for activity level estimates (i.e., outputs) for each of the five QI strategies for the same fiscal year as the expenditure totals. We provided more than one output measure for each QI strategy and asked that the Consortia provide figures for those they had available. We conducted follow-up phone calls with seven Consortia to review their survey submissions and to provide any clarifying guidance needed as the Consortia staff completed the survey.

Throughout the survey, comment boxes were provided for Consortia to record any caveats or to provide supplemental detail regarding the information provided on each QI component cost and outputs. The survey was formatted as a protected Excel spreadsheet with an introductory worksheet followed by worksheets for each expenditure category and for the summary QI activity levels.

Once the cost survey instrument was finalized, the survey was sent electronically to the 11 Consortia representatives identified in the cognitive interviews as the best point of contact, typically the executive director or a chief budget or fiscal officer. The email introduction included a general introduction and overview of the survey, instructions for completing the survey, QI strategy definitions, and a preferred completion date. The survey was attached as a protected Excel file. After the initial invitation email was sent, individual reminder emails were sent to the primary and secondary Consortia representatives. As needed, we made follow-up phone calls to Consortia that did not respond to the email invitation and follow-ups. We provided a four-week window before we began contacting Consortia representatives to set up a follow-up call to review their survey submissions or to go over any questions they had about the instrument. The overall cost survey administration period occurred from June 2015 through September 2015.

Ten out of the 11 Consortia completed the cost survey. We were able to conduct follow-up calls with 7 of the 10 Consortia that completed the cost survey to clarify information that was provided and address information gaps. In several cases, information gaps could not be resolved. As discussed in Chapter 8, these five cases were not included in the primary analysis.

As noted above, we asked Consortia for expenditures and activity levels for the most recent fiscal year where the Consortia had complete information. Three Consortia provided QI expenditure and activity data for fiscal year 2013–2014, while the remaining seven Consortia provided data for 2014-2015 expenditures. The completeness and accuracy of survey responses varied across Consortia. Although we asked Consortia to provide information on actual expenditures and in-kind contributions, one Consortium based their financial reporting on budgetary information. Consortia were asked to provide their best estimate of expenditures disaggregated by QI activity. Some were able to provide this detailed allocation, but four QRISs were unable to estimate this distribution. These four QRIS were able to allocate costs for some of their total costs. In order to assign the unallocated costs into one of the five QI supports, we referenced the QI support distribution of the allocated costs and applied this to those costs left unallocated.

Qualitative Data Sources and Methods

As part of the implementation study component, the study team conducted several qualitative data collection activities, including interviews with QRIS administrators of all 17 Consortia and a sample of early learning staff or providers in the 11 focal Consortia, and one focus group with parents in each of the 17 Consortia. More details about these samples and data collection procedures follows.

QRIS Administrator Interviews

The study team conducted interviews with the QRIS administrators of all 17 Consortia in summer 2014 and 2015. A total of 36 interviews were conducted. Two interviews were conducted in San Diego, one with First 5 San Diego and another with the San Diego County Office of Education. These interviews solicited feedback on progress that had been made on implementation of the QRIS, as well as reflections on the implementation process and plans for sustainability.

Provider Interviews

Interviews with providers—center teachers, directors, and FCCH providers—were completed in July and August of 2015. The protocol was developed to encourage staff to describe how the implementation of the QRIS in their site and community had impacted quality early learning and staff development. A $50 Amazon gift card was e-mailed to each respondent after the interview was completed. Providers to be included in the interviews were sampled from the 11 focal Consortia using convenience sampling. In order to be included in the sample, a site needed to operate year-round and have available staff in July and August. After initial calls to invite sites to participate, some sites were replaced due to staff turnover. The interviews were completed with staff who had participated in the QRIS the previous year. All of the provider interviews were conducted by phone in English. A total of 25 early learning staff interviews were conducted, including with 13 center directors, 5 classroom teachers, and 7 FCCH providers.

Parent Focus Groups

Parent focus groups were conducted in each Consortium between April and August 2015. The focus group protocol was developed to encourage parents to share their ideas about ECE quality and to respond to the quality elements in the Hybrid Rating Matrix. The study team worked with Consortia staff to coordinate the focus groups. A total of 17 parent focus groups were conducted, one in each of the 17 Consortia. Allen, Shea & Associates, in conjunction with Consortia staff, recruited parents to participate in the focus groups. The one-hour sessions took place in FCCHs, ECE centers, Resource and Referral agencies, First 5 offices, and other settings at various times of day, depending on the needs of the attending parents. In total, 146 parents participated in focus groups (approximately nine parents in each group, on average), and $50 gift cards were distributed to each parent at the end of the session. The focus groups in two Consortia were conducted exclusively in Spanish; the focus group in one Consortium was conducted in English and had some Spanish facilitation. All other focus groups were conducted in English.

Summary of Data and Sample Limitations

The results presented in the body of this report should be interpreted within the context of several data challenges and limitations. First, a little more than a third of participating programs had a full, nonprovisional rating and could therefore be included in study analyses. The programs with provisional ratings appear to differ from the fully rated programs in several ways, suggesting that fully rated programs are not representative of the entire population of programs in the QRIS, thus limiting the generalizability of the validation study results presented in this report. There is also limited variation in ratings, and very few sites rated at Tier 2. This is an issue especially with the validity analyses relating tier rating to children's outcomes, where there are only five Tier 2 sites included in the sample, and these sites differ from other sites in terms of their funding source and populations served. These differences make it difficult to isolate differences in children's outcomes that might be related to the tier rating.

Second, we obtained a smaller than anticipated sample for the validity analyses relating tier rating to observed quality, and there is some indication that programs participating in the classroom observations differ from programs in the QRIS that did not participate. These limitations mean that the study results should be interpreted with some caution. In particular, analyses that have nonsignificant results are not conclusive because the small sample size limits our ability to detect small differences. In addition, the analysis results apply to the programs that participated in the classroom observations, and results might differ if a broader group of programs participated in the study.

Third, the analyses using the CLASS measure included a combination of data collected by the study team and existing data collected by independent observers for Consortia's QRIS ratings. Using data collected for the QRIS ratings has several potential limitations. The study team was not able to verify the reliability of the classroom observation data collected by Consortia. However, the Consortia are required to follow stringent requirements for training and certification of classroom observers, and the study team is confident that the data can be considered reliable. In addition, the study team's observation data were collected in spring 2014, but the Consortia observation data were collected prior to January 2014, the cutoff date for inclusion in this study, and could have been collected as early as August 2013. This time difference could introduce a bias, however, sensitivity analyses found no differences in findings when analyses were run separately for each data source.

Finally, it also is important to remember that the QRIS is relatively new and not fully implemented (as evidenced by the large number of provisionally rated programs). Thus, results presented in the report should be interpreted within the context of the system's stage of development and current participants.

Analysis Methods

The Independent Evaluation of California's RTT-ELC QRIS uses multiple methodologies to address the study research questions pertaining to implementation of the QRIS, validation of the QRIS ratings, quality improvement activities and their relation to program and child outcomes, and the cost of components of the RTT-ELC QRIS and quality improvement activities. Below, we provide an overview of the specific analysis methods for each component of the evaluation.

Implementation Study

Data from all interviews and focus groups were analyzed qualitatively. This included interviews with QRIS administrators, interviews with providers, and focus groups with parents. All interviews and focus groups were recorded and transcribed to ensure that all responses were accurately captured. Transcripts were coded using NVivo, a qualitatively data analysis software system, and reviewed using qualitative data analysis techniques to identify common themes and response patterns by topic area. Summaries of results were generated and typical quotes reflecting common themes were highlighted.

Validation of the QRIS Ratings

To examine the validity of the QRIS ratings, we employed distinct analysis methods to examine different aspects of validity, including the measurement properties of the QRIS ratings, the validity of the QRIS ratings for differentiating programs based on observed quality and for predicting children's outcomes. We also examined how alternative methods of calculating QRIS ratings affect the validity of the ratings.

Measurement Properties of the QRIS Ratings

Analyzing the measurement properties of the QRIS ratings provides information about how well the QRIS defines and measures quality. For this part of the study, the study team examined the distribution of ratings and element scores, the characteristics of programs that predict QRIS ratings, the internal consistency of the QRIS ratings, and the relationship between the element scores and the overall QRIS ratings. For these analyses, we used existing state data on programs participating in California's QRIS, including program characteristics and QRIS ratings and element scores, for 365 centers and 107 FCCHs with full ratings as of January 2014.

We first examined the distribution of ratings and element scores, by reviewing the number or percentage of programs with full ratings that received each QRIS rating or element score. We examined the distributions separately for centers and FCCHs.

To identify the characteristics of programs that predict QRIS ratings, we examined summary statistics (means or percentages) for each characteristic among programs at each rating level, and then conducted ordinal logistic regression analyses indicating which program characteristics, if any, are significantly associated with QRIS rating levels. We conducted separate analyses for centers and FCCHs. The specific characteristics of programs that we examined include the enrollment size, whether or not the program serves infants and toddlers, whether or not program staff use a language other than English in the classroom, the Consortium in which the program is located, and whether or not the program receives several types of funding, including Child Signature Program, State Preschool, Head Start or Early Head Start, or child care subsidies.

To examine the internal consistency of the QRIS ratings, we calculated Cronbach's alpha statistics using the element scores, and also calculated the Cronbach's alpha removing each element to see if the internal consistency would improve without any element score. These analyses assess the extent to which the QRIS rating measures a single latent construct of program quality.

To examine the relationships between the element scores and the overall QRIS ratings, we examined the correlation between each pair of elements, and between each element and the overall QRIS rating. These analyses describe how the element scores relate to each other and to the overall rating.

Validity of the QRIS Ratings for Differentiating Programs Based on Observed Quality

The first set of analyses describe how well the QRIS ratings align with independent measures of quality. For this part of the study, the study team examined the relationship between QRIS ratings and program average scores on the CLASS and PQA instruments, and also examined the relationship between each element score and program average scores on the CLASS and PQA instruments. We conducted separate analyses for centers and FCCHs, using different analysis methods for each program type due to differences in the number of programs in each group. We drew from QRIS ratings and element score data and classroom observations in 175 programs, with differing sample sizes for specific analyses due to the number of programs with data collected using the different versions of the CLASS and PQA instruments.

For centers, we used analysis of variance (ANOVA) models to determine whether average preschool CLASS, preschool PQA Form A, and PQA Form B scores differ significantly for each QRIS rating level or element score. Specifically, we examined differences in domain scores on the preschool CLASS for 135 centers, on the preschool PQA Form A for 134 centers, and on the PQA Form B for 124 centers. We also calculated the mean and standard deviation of the toddler CLASS and infant and toddler PQA Form A scores, without making a statistical comparison of these averages due to the small sample size. Specifically, we examined domain scores on the toddler CLASS for 14 centers and the infant and toddler PQA for 18 centers. Averages were only reported for QRIS rating levels with more than 5 programs with observation data.

For FCCHs, we calculated the mean and standard deviation of the preschool CLASS and PQA instruments for programs at each QRIS rating level, without making statistical comparisons due to the small sample size. For the PQA instrument, there were 27 FCCHs with observations on the preschool Form A. For the CLASS instrument, there only 14 programs total with preschool scores and only one rating level had more than 5 observations, so results could not be reported.

Validity of the QRIS Ratings for Predicting Children's Outcomes

Analyses investigated whether children in higher-rated programs exhibit more positive developmental outcomes. Findings for this set of analyses provide information about the predictive validity of the QRIS. First, we analyzed the association between tier rating levels and child outcomes. Second, we tested the associations between sites' point values on each element in the Hybrid Matrix and child outcomes in the domains of language and literacy, mathematics, and executive function.

The analytic sample included all centers with complete ratings in which the research team gathered child assessment data: a total of 113 centers with complete data for 1511 to 1552 children, depending on the outcomes of interest. Separate models were also run including FCCHs. Data sources include the state administrative data for programs participating in the

QRIS, which included the tier ratings and scores on the rating elements, and child assessment data that the research team gathered in the fall and spring.

Associations were tested with hierarchical linear models (HLM) that account for the grouping of children within centers and predict children's outcomes in the spring, while controlling for baseline skills and development in the fall. Characteristics of early learning programs were modeled at level two and child covariates were included at level one. Specifically, at level one models controlled for children's assessment scores in the fall, age at the time of assessment, the number of days between the fall and spring assessment, child gender, special needs status, home language (Spanish, English/Spanish, and Other homes languages), fall preLAS score, and a series of variables controlling for recodes for missing data.

At level two, variables included QRIS tier ratings or point values on the rating elements. We included separate indictors for ratings (or element scores) of 3, 4, or 5, and treated the group of sites with ratings (or element scores) of 1 or 2 as one category. Since there were so few Tier 2 sites and they appeared to have somewhat different program characteristics (e.g., funding sources, populations served), we used Tier 3 (or 3 points) as the reference category. Models also controlled for total enrollment, whether the site enrolled infants and toddlers, whether the site received First 5, Title 5, Head Start, or voucher funding through separate indicators for each funding stream, and whether the site enrolled families who paid their own fees. Models also included fixed effects for Consortium.

All other level 1 variables were fixed and not modeled at level 2. All variables were grand mean centered at levels 1 and 2, except the outcome variable, and county fixed effects. We used zero imputation to address missing data. For this approach, we recoded missing values to zero and created indicators that the value was previously missing and had been recoded.

Alternative Methods of Calculating QRIS Ratings

We examined how alternative methods of calculating QRIS ratings affect the ratings programs receive, and the validity of those ratings, to inform future decisions about whether and how California might alter the QRIS rating approach. For this part of the study, the study team first used programs' existing element scores to calculate ratings using different calculation approaches, and then compared the distribution of ratings using California QRIS ratings and each alternative rating approach. We conducted these analyses separately for centers and FCCHS, using the existing state data for 365 centers and 107 FCCHs with full ratings as of January 2014. Next, we examined the validity of each alternative rating approach for the purpose of differentiating programs by observed quality by comparing the average preschool CLASS scores (for 135 centers) and PQA scores (for 134 centers) at each rating level; then we compared the validity results for each alternative rating approach and the California QRIS ratings. Finally, we examined the validity of each alternative rating approach for the purpose of predicting children's outcomes using the approach described above. Sample sizes ranged from 1511 to 1552 children enrolled in 113 centers.

Exhibit 1A.15 provides a definition for each rating approach included in these comparisons.

Exhibit 1A.15. Alternative Rating Approaches Examined in This Study

Rating Type	Rating Definition
Two-Level Block	Tiers 1 and 2 are blocked, and Tiers 3–5 are point-based for programs meeting block criteria for Tier 2. This approach is used as a local adaptation to California's rating approach in some counties.
Five-Level Block	Tiers 1–5 are blocked.
Element Average	Scores are determined by taking the average of all applicable rating elements (seven elements for centers, six elements for infant-only centers, five elements for FCCHs, four elements for infant-only FCCHs). Averages are rounded to whole numbers (round up for 0.5 and above, round down below 0.5).

NOTE: Elements are the domains of quality included in California's QRIS. All rating approaches are calculated using element scores collected by Consortia on participating programs. Scores for each element range from 1 to 5 and are determined by meeting criteria for each point level. Centers are rated on seven elements (centers serving only infants are rated on six elements), and FCCHs are rated on five of the seven elements that apply to centers (FCCHs serving only infants are rated on four elements). Some Consortia made local adaptations to element scoring rather than using the statewide criteria.[3] Blocking a tier means that programs meet all requirements for each element score at that tier (for example, blocking at Tier 2 means that programs must have a score of at least 2 on all elements in order to be rated at 2 or higher).

To compare the validity of each rating approach for the purpose of differentiating programs based on observed quality, we used analysis of variance (ANOVA) models to determine whether average preschool CLASS, preschool PQA Form A, and PQA Form B scores differ significantly for rating level, for each of the alternative rating approaches listed in exhibit 1A.15. To compare the model results for each alternative rating approach and the California QRIS ratings, we examined the model coefficients and *p* values to identify which approach was most strongly associated with domain scores on each CLASS and PQA domain. Models followed the same form described above for validity analyses predicting children's outcomes.

QI Activities and their Relationship with Classroom Quality and Child Outcomes

These analyses include a descriptive summary of quality improvement activities, analyses examining how QI activities (including training, coaching or technical assistance, peer supports, and credit-bearing coursework or higher education) and incentives relate to classroom quality outcomes, and analyses examining how these activities and incentives relate to child outcomes.

Descriptive Summary of QI Activities

To describe the types and level of participation in various QI activities, we conducted descriptive analyses of the staff and director survey responses. This included running means and frequencies for all relevant survey items. These descriptive results were generated separately for centers and

[3] The study analyses use simulated QRIS ratings that the study team calculated from element score data collected by Consortia, using the California QRIS rating guidelines without any local options to the extent possible. In most of the 11 Consortia with valid QRIS ratings, local adaptations to the criteria were applied after element scores were calculated. However, two Consortia incorporated local adaptations into the element scores, and the study team was not able to recalculate the element scores without these local adaptations.

FCCHs and for lead teachers and assistant teachers, since these groups have different experiences, needs, and resources available to them. The number of FCCH staff participating in the survey was relatively small, however, making estimates of their experiences less reliable and statistical comparisons with centers infeasible.

Classroom Quality Outcomes

We use a multiple regression analysis approach to examine how teachers' QI activities and incentives relate to their classroom quality outcomes. These analyses draw from multiple sources of data, including existing state data on programs participating in California's QRIS, classroom observations using the CLASS instrument in 2013–14 and 2014–15, and teacher-reported data on QI activities and incentives from the online staff and director surveys.

We ran four sets of regression models to examine how different aspects of QI efforts among lead teachers relate to classroom quality outcomes in their classrooms. Specifically, controlling for spring 2014 CLASS scores and other characteristics, we examine the extent to which the following variables predict 2015 CLASS scores:

1) Type of QI activity: participation in training, coaching, peer supports, or credit-bearing coursework over the 2014–15 program year
2) Dosage of QI activities: total hours of training, coaching, or peer supports over the 2014–15 program year
3) Participation in sustained coaching: receiving at least 2 hours of coaching per month for at least 7 out of 10 months over the 2014–15 program year, defined as
4) Topics covered in training and coaching: receipt of both training and coaching on teacher-child interactions or understanding or improving CLASS scores over the 2014–15 program year

In addition to controlling for spring 2014 CLASS scores in the same domain, all models also controlled for teacher characteristics (years of early ECE teaching experience, having at least a Bachelor's degree, English not the teacher's primary language, teacher is White and non-Hispanic) and program characteristics (teaches in a program with a QRIS rating of 4 or 5, teaches in a program with standards-based funding such as Head Start or State Preschool). Some models also controlled for receipt of a financial incentive for quality improvement in 2014–15, as well as participation in training, coaching, peer support, and credit-bearing courses in the 2013–14 program year.

The regression models in this report use Pre-K CLASS scores and include models with centers only (including 147 lead teachers in separate classrooms, within 98 centers), as well as models combining centers and FCCHs (161 lead teachers in separate classrooms, within 112 programs). Because there are only 14 FCCH teachers with Pre-K CLASS scores, we could not separately examine the relationship between quality improvement and CLASS outcomes for FCCHs only. The regression models could only be run with Pre-K CLASS scores because there were not enough toddler CLASS scores (56 total, including 13 in FCCHs and 43 in centers) to permit this type of analysis and the toddler scores cannot be combined with pre-K scores due to differences

in the domains that are measured. We could only conduct descriptive analyses (cross-tabulations without controlling for other characteristics of teachers) with the toddler scores, and these results do not account for any other differences between teachers.

The regression models use full-information maximum likelihood estimation (to account for missing data) with cluster-robust standard errors (to account for the clustering of teachers in programs). The CLASS scores included in these models are transformed (log 10 or square root transformation) to normalize the regression residuals; the regression coefficients reported in chapter 7 have been retransformed so they can be interpreted as the average change in the raw CLASS score for each one-unit change in the predictor variable.

Child Outcomes

We use a hierarchical linear modeling approach to examine how teachers' participation in QI activities and their receipt of incentives relate to the skills of the children in their classroom. These analyses draw on existing state data on programs participating in California's QRIS, teacher-reported data on QI activities and incentives from the online staff and director surveys, and child assessment data gathered in the fall and spring of the program year

The analytic sample included all centers in which teacher survey and child assessment data were available. Sites with a rating of 2 were excluded from the sample. The analytic sample included 108 teachers and 1,075 children. Separate models including FCCHs were not run because the increase in sample size would have been only 4 additional teachers and 13 additional children.

Following the approach taken for the classroom quality outcomes models, we ran models to examine four sets of QI measures: (1) types of QI activities, (2) dosage of QI activities, (3) participation in sustained coaching, and (4) coaching on specific content areas, including language and literacy, mathematics, and social-emotional development.

Children's spring assessment scores were the outcomes at level one. Models controlled for children's assessment scores in the fall, age at the time of assessment[4], the number of days between the fall and spring assessment, child gender, special needs status, home language (Spanish, English/Spanish, and Other homes languages), fall preLAS score, and a series of variables controlling for recodes for missing data.

At level two, we modeled the level one intercept using QI variables as the predictors of interest, while controlling for teacher and program characteristics. Teacher covariates included years of experience, and indicators for whether the teacher held a Bachelor's degree, spoke a non-English language, and was White and non-Hispanic. Site-level covariates included whether the site was rated at Tier 4 or Tier 5, received standards-based public funding (such as Head Start or State Preschool), enrolled infants and toddlers, and total site enrollment. Models also included fixed effects for Consortium.

[4] Age at time of assessment was not included for models predicting the Woodcock Johnson scores because age equivalent scores were used in these analysis.

All other level one variables were fixed and not modeled at level two. All variables were grand mean centered at levels one and two, except the outcome variable, QI variables of interest, and county fixed effects. We used zero imputation to address missing data.

Additional models control for the receipt of financial incentives in 2014–15, and previous QI experience during the 2013–14 program year, including training, coaching, credit-bearing ECE coursework, and peer support.

Cost of Quality Improvement Activities

To estimate the cost for Consortia to administer each type of QI activity, we used data gathered through the QI Activity Cost Survey. We conducted descriptive analyses to estimate a per unit cost across Consortia for each of the following types of activities: coaching and mentoring, credit-bearing courses, financial incentives, trainings and workshops, and peer support activities.

We use the reported data collected in the survey to generate estimates of the costs per unit of QI activity as expended through Consortia funds. We primarily focus on reported figures from five Consortia with the most comprehensive and reliable information. As noted, all 11 Consortia completed the QI Activity Cost Survey. Of those 11 Consortia, 1 did not have figures on the level of QI outputs, so we could not estimate the measures of cost per unit of QI activity. Of the remaining 10 Consortia, 5 had the most complete information and were able to allocate costs across the set of QI activities they provided. We rely on the data for those five Consortia in reporting our primary estimates. However, we also provide estimates based on all 10 Consortia for completeness.

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Appendix 2A. List of QRIS Administrators Interviewed

County Name	Name of Interviewee(s)
Alameda	Mary Anne Doan (First 5 Alameda County), Malia Ramler (First 5 Alameda County)
Contra Costa	Edirle Menezes (First 5 Contra Costa)
El Dorado	Kathleen Guerrero (First 5 El Dorado), Elizabeth Blakemore (First 5 El Dorado)
Fresno	Isela Turner (Fresno County Office of Education), Lupe Jaime (Fresno County Office of Education), Matilda Soria (Fresno County Office of Education)
Los Angeles–LA OCC	Jocelyn Tucker (Los Angeles County Office of Child Care), Cheri Thomas (Los Angeles County Office of Child Care)
Los Angeles–LAUP	Alex Himmel (Los Angeles Universal Preschool), Rosa Valdes (Los Angeles Universal Preschool)
Merced	Christie Hendricks (Merced County Office of Education), Samantha Thompson (Merced County Office of Education)
Orange	Krista Murphy (Orange County Department of Education)
Sacramento	Natalie Woods Andrews (Sacramento County Office of Education), Nancy Herota (Sacramento County Office of Education), and others
San Diego	Gloria Corral (First 5 San Diego), Claire Crandall (San Diego County Office of Education), Lucia Garay (San Diego County Office of Education)
San Francisco	Wei-min Wang (First 5 San Francisco), Ingrid Mezquita (First 5 San Francisco)
San Joaquin	Dorene Jow (First 5 San Joaquin), Lani Schiff-Ross (First 5 San Joaquin)
Santa Barbara	Eileen Monahan (First 5 Santa Barbara), Sharol Vicker (First 5 Santa Barbara), Mari Ortega-Garcia (First 5 Santa Barbara)
Santa Clara	George Phillip (WestEd), Ilene Hertz (WestEd). Regina Garcia (WestEd)
Santa Cruz	David Brody (First 5 Santa Cruz), Vicki Boriack (First 5 Santa Cruz)
Ventura	Carrie Murphy (Ventura County Office of Education), Michell Henry (Ventura County Office of Education), Petra Puls (First 5 Ventura)
Yolo	Tamiko Kwak (Child Care Services Resource & Referral), Justine Jimenez (City of West Sacramento), Shonna Clark (City of West Sacramento)

Appendix 2B. California RTT-ELC Hybrid Rating Matrix

California RTT-ELC Quality Continuum Framework—Hybrid Rating Matrix With Elements and Points for Consortia Common Tiers 1, 3, and 4

ELEMENT	BLOCK (Common Tier 1) Licensed In-Good Standing	2 POINTS	3 POINTS	4 POINTS	5 POINTS
CORE I: CHILD DEVELOPMENT AND SCHOOL READINESS					
1. Child Observation	☐ Not required	☐ Program uses evidence-based child assessment/observation tool annually that covers all five domains of development	☐ Program uses valid and reliable child assessment/ observation tool aligned with CA *Foundations & Frameworks* twice a year	☐ DRDP 2010 (minimum twice a year) and results used to inform curriculum planning	☐ Program uses DRDP 2010 twice a year and uploads into DRDP Tech and results used to inform curriculum planning
2. Developmental and Health Screenings	☐ Meets Title 22 Regulations	☐ Health Screening Form (Community Care *Licensing form LIC 701 "Physician's Report - Child Care Centers" or equivalent)* used at entry, then: **1.** Annually **OR** **2.** Ensures vision and hearing screenings are conducted annually	☐ Program works with families to ensure screening of all children using a **valid and reliable developmental screening tool** at entry and as indicated by results thereafter **AND** ☐ Meets Criteria from point level 2	☐ Program works with families to ensure screening of all children using the **ASQ** at entry and as indicated by results thereafter **AND** ☐ Meets Criteria from point level 2	☐ Program works with families to ensure screening of all children using the **ASQ & ASQ-SE**, if indicated, at entry, then as indicated by results thereafter **AND** ☐ Program staff uses children's screening results to make referrals and implement intervention strategies and adaptations as appropriate **AND** ☐ Meets Criteria from point level 2
CORE II: TEACHERS AND TEACHING					
3. Minimum Qualifications for Lead Teacher/ Family Child Care Home (FCCH)	☐ Meets Title 22 Regulations [**Center:** 12 units of Early Childhood Education (ECE)/Child Development (CD) **FCCH:** 15 hours of training on preventive health practices]	☐ **Center:** 24 units of ECE/CD[5] **OR** Associate Teacher Permit ☐ **FCCH:** 12 units of ECE/CD **OR** Associate Teacher Permit	☐ 24 units of ECE/CD + 16 units of General Education **OR** Teacher Permit **AND** ☐ 21 hours professional development (PD) annually	☐ Associate's degree (AA/AS) in ECE/CD (or closely related field) **OR** AA/AS in any field plus 24 units of ECE/CD **OR** Site Supervisor Permit **AND** ☐ 21 hours PD annually	☐ Bachelor's degree in ECE/CD (or closely related field) **OR** BA/BS in any field plus/with 24 units of ECE/CD (or Master's degree in ECE/CD) **OR** Program Director Permit **AND** ☐ 21 hours PD annually
4. Effective Teacher-Child Interactions: CLASS Assessments (*Use tool for appropriate age group as available)	☐ Not Required	☐ Familiarity with CLASS for appropriate age group as available by one representative from the site	☐ Independent CLASS assessment by reliable observer to inform the program's professional development/improvement plan	☐ Independent CLASS assessment by reliable observer with minimum CLASS scores: **Pre-K** ▪ Emotional Support – 5 ▪ Instructional Support –3 ▪ Classroom Organization – 5 **Toddler** ▪ Emotional & Behavioral Support – 5 ▪ Engaged Support for Learning – 3.5	☐ Independent assessment with CLASS with minimum CLASS scores: **Pre-K** ▪ Emotional Support – 5.5 ▪ Instructional Support – 3.5 ▪ Classroom Organization – 5.5 **Toddler** ▪ Emotional & Behavioral Support – 5.5 ▪ Engaged Support for Learning – 4

[5] For all ECE/CD units, the core 8 are desired but not required.

ELEMENT	BLOCK (Common Tier 1) Licensed In-Good Standing	2 POINTS	3 POINTS	4 POINTS	5 POINTS
CORE III: PROGRAM AND ENVIRONMENT - Administration and Leadership					
5. Ratios and Group Size (Centers Only beyond licensing regulations)	☐ **Center:** Title 22 Regulations **Infant** Ratio of 1:4 **Toddler Option** Ratio of 1:6 **Preschool** Ratio of 1:12 ☐ **FCCH:** Title 22 Regulations *(excluded from point values in ratio and group size)*	☐ **Center - Ratio:Group Size** **Infant/Toddler** – 4:16 **Toddler** – 3:18 **Preschool** – 3:36	☐ **Center - Ratio:Group Size** **Infant/Toddler**– 3:12 **Toddler** – 2:12 **Preschool**– 2:24	☐ **Center - Ratio:Group Size** **Infant/Toddler** – 3:12 or 2:8 **Toddler** – 2:10 **Preschool** – 3:24 or 2:20	☐ **Center - Ratio:Group Size** **Infant/Toddler** – 3:9 or better **Toddler** – 3:12 or better **Preschool** – 1:8 ratio and group size of no more than 20
6. Program Environment Rating Scale(s) (Use tool for appropriate setting: ECERS-R, ITERS-R, FCCERS-R)	☐ Not Required	☐ Familiarity with ERS and every classroom uses ERS as a part of a Quality Improvement Plan	☐ Independent ERS assessment. All subscales completed and averaged to meet overall score level of 4.0	☐ Independent ERS assessment. All subscales completed and averaged to meet overall score level of 5.0	☐ Independent ERS assessment. All subscales completed and averaged to meet overall score level of 5.5
7. Director Qualifications (Centers Only)	☐ 12 units core ECE/CD+ 3 units management/ administration	☐ 24 units core ECE/CD + 16 units General Education + 3 units management/ administration **OR** Master Teacher Permit	☐ Associate's degree with 24 units core ECE/CD + 6 units management/ administration + 2 units supervision **OR** Site Supervisor Permit **AND** ☐ 21 hours PD annually	☐ Bachelor's degree with 24 units core ECE/CD + 8 units management/ administration **OR** Program Director Permit **AND** ☐ 21 hours PD annually	☐ Master's degree with 30 units core ECE/CD including specialized courses + 8 units management/administration, **OR** Administrative Credential **AND** ☐ 21 hours PD annually

TOTAL POINT RANGES					
Program Type	**Common-Tier 1**	**Local-Tier 2[6]**	**Common-Tier 3**	**Common-Tier 4**	**Local-Tier 5[7]**
Centers 7 Elements for 35 points	**Blocked** (No Point Value) – Must Meet All Elements	**Point Range** 8 to 19	**Point Range** 20 to 25	**Point Range** 26 to 31	**Point Range** 32 and above
Infant-only Centers 6 elements for 30 points	**Blocked** (No Point Value) – Must Meet All Elements	**Point Range** 7 to 15	**Point Range** 16 to 21	**Point Range** 22 to 26	**Point Range** 27 and above
FCCHs 5 Elements for 25 points	**Blocked** (No Point Value) – Must Meet All Elements	**Point Range** 6 to 13	**Point Range** 14 to 17	**Point Range** 18 to 21	**Point Range** 22 and above
Infant-only FCCHs 4 Elements for 20 points	**Blocked** (No Point Value) – Must Meet All Elements	**Point Range** 5 to 10	**Point Range** 11 to 13	**Point Range** 14 to 17	**Point Range** 18 and above

Note: Point values are not indicative of Tiers 1-5 but reflect a range of point values. December 17, 2013

[6]Local-Tier 2: Local decision if Blocked or Points and if there are additional elements

[7] Local-Tier 5: Local decision if there are additional elements included

Appendix 3A. Detailed Results from Descriptive Analyses of the QRIS Ratings

Descriptive Statistics of QRIS Ratings and Element Scores for Programs With Full California QRIS Ratings as of January 2014

Exhibit 3A.1. Distribution of California QRIS Ratings and Element Scores Among Fully Rated Programs in January 2014, All Programs and by Program Type

California QRIS Rating Tier or Element Score	All Programs		Centers		FCCHs	
	Number	Percentage	Number	Percentage	Number	Percentage
California QRIS Rating Tier						
Tier 1	0	0.0%	0	0.0%	0	0.0%
Tier 2	77	16.3%	20	5.5%	57	53.3%
Tier 3	158	33.5%	124	34.0%	34	31.8%
Tier 4	200	42.4%	189	51.8%	11	10.3%
Tier 5	37	7.8%	32	8.8%	5	4.7%
Total	472	100.0%	365	100.0%	107	100.0%
Child Observation Element Score						
1 point	57	12.1%	16	4.4%	41	38.3%
2 point	32	6.8%	16	4.4%	16	15.0%
3 points	62	13.2%	51	14.0%	11	10.3%
4 points	255	54.3%	217	59.8%	38	35.5%
5 points	64	13.6%	63	17.4%	1	0.9%
Developmental and Health Screenings Element Score						
1 point	98	20.9%	59	16.3%	39	36.4%
2 point	99	21.1%	61	16.8%	38	35.5%
3 points	23	4.9%	19	5.2%	4	3.7%
4 points	52	11.1%	43	11.8%	9	8.4%
5 points	198	42.1%	181	49.9%	17	15.9%
Minimum Qualifications for Lead Teacher Element Score						
1 point	32	6.8%	7	1.9%	25	23.4%
2 point	111	23.6%	74	20.4%	37	34.6%
3 points	50	10.6%	37	10.2%	13	12.1%
4 points	150	31.9%	135	37.2%	15	14.0%
5 points	127	27.0%	110	30.3%	17	15.9%
Effective Teacher-Child Interactions Element Score						
1 point	6	1.3%	6	1.7%	0	0.0%
2 point	12	2.6%	9	2.5%	3	2.8%

California QRIS Rating Tier or Element Score	All Programs		Centers		FCCHs	
	Number	Percentage	Number	Percentage	Number	Percentage
3 points	283	60.2%	203	55.9%	80	74.8%
4 points	74	15.7%	63	17.4%	11	10.3%
5 points	95	20.2%	82	22.6%	13	12.1%
Ratios and Group Sizes Element Score[1]						
1 point			2	0.6%		
2 point			18	5.0%		
3 points			36	9.9%		
4 points			207	57.0%		
5 points			100	27.5%		
Environment Rating Scales Element Score						
1 point	11	2.3%	2	0.6%	9	8.4%
2 point	93	19.8%	46	12.7%	47	43.9%
3 points	158	33.6%	133	36.6%	25	23.4%
4 points	86	18.3%	73	20.1%	13	12.1%
5 points	122	26.0%	109	30.0%	13	12.1%
Director Qualifications Element Score[1]						
1 point			3	0.8%		
2 point			54	14.9%		
3 points			58	16.0%		
4 points			125	34.4%		
5 points			123	33.9%		
Total[2]	470	100.0%	363	100.0%	107	100.0%

[1] The Ratio and Group Sizes element score and the Director Qualifications element score do not apply to FCCHs. For these elements, the distribution of scores is presented for centers only.

[2] The element scores are presented for 363 of the 365 centers with full ratings, excluding 2 centers that serve infants only because the element score requirements for those programs differ slightly. None of the 107 FCCHs with full ratings serve infants only, so element scores are presented for all of them.

Characteristics of Programs That Predict QRIS Ratings

Exhibit 3A.2. Ordered Logistic Regressions of QRIS Ratings and Element Scores on Program Characteristics, Centers

Program Characteristic	Odds Ratios for Each Dependent Variable in Ordinal Logistic Regression Models							
	QRIS	CO	DHS	MQ	CLASS	RGS	ERS	DQ
General Characteristics								
Enrollment	1.00	1.02**	0.99*	1.00	1.00	0.98***	1.01	1.01
Serves infants and toddlers	0.79	0.43*	1.06	0.55	1.83	1.30	0.71	0.95
Uses language other than English	1.21	0.91	2.35*	0.66	0.91	0.98	1.07	0.89
Funding Streams								
First 5 California CSP 1 or CSP 2 funding	5.31**	33.34***	4.33×10^5	1.39	0.45	1.19	47.70***	0.85
California Title 5 (State Preschool, General Child Care, or CalSAFE) funding	4.01***	2.71**	3.10***	1.27	1.86*	2.53**	2.27**	0.82
Federal Head Start or Early Head Start funding	1.53	3.41***	1.35	0.54*	0.90	1.88*	0.95	1.04
State/Federally Funded Child Care Subsidy Vouchers	0.38	0.83	0.29	0.08***	0.45	1.28	0.44	0.18*

* $p < .05$, ** $p < .01$, *** $p < .0001$

n = 346 centers for all models

NOTE: Each column represents a separate ordinal logistic regression model, which also included fixed effects for Consortia.

QRIS = California QRIS rating; CO = Child Observation element score; DHS = Developmental and Health Screenings; MQ = Minimum Qualifications for Lead Teacher or FCCH; CLASS = Effective Teacher-Child Interactions: CLASS; RGS = Ratios and Group Sizes; ERS = Program Environment Rating Scales; DQ = Director Qualifications

Exhibit 3A.3. Ordered Logistic Regressions of QRIS Ratings and Element Scores on Program Characteristics, FCCHs

Program Characteristic	Odds Ratios for Each Dependent Variable in Ordinal Logistic Regression Models					
	QRIS Rating	CO	DHS	MQ	CLASS	ERS
General Characteristics						
Enrollment	1.03	1.09	1.01	1.07	0.94	0.88*
Serves infants and toddlers	0.56	0.25	1.43	0.32	1.53	1.14
Uses language other than English	0.67	1.38	3.02	0.49	0.68	0.90
Funding Streams						
First 5 California CSP 1 or CSP 2 funding	4.12	84.73	0.00	1.35	21.65	18.96
California Title 5 (State Preschool, General Child Care, or CalSAFE) funding	4.41	8.34	655.59**	0.97	0.95	9.72*
Federal Head Start or Early Head Start funding	3.51	7.52**	0.91	0.70	1.27	12.71***
State/Federally Funded Child Care Subsidy Vouchers	0.84	0.48	1.60	1.24	0.43	0.51

* $p < .05$, ** $p < .01$, *** $p < .0001$

$n = 96$ for all models

NOTE: Each column represents a separate ordinal logistic regression model, which also included fixed effects for Consortia.

QRIS = California QRIS rating; CO = Child Observation element score; DHS = Developmental and Health Screenings; MQ = Minimum Qualifications for Lead Teacher/ FCCH; CLASS = Effective Teacher-Child Interactions: CLASS; ERS = Program Environment Rating Scales

Relationships Between Element Scores and QRIS Ratings

Exhibit 3A.4. Correlations (Spearman's rho) Among Element Scores, Centers

	CO	DHS	MQ	CLASS	RGS	ERS	DQ
Child Observation (CO)	1.000						
Developmental and Health Screenings (DHS)	0.348*	1.000					
Minimum Qualifications for Lead Teacher or FCCH (MQ)	0.233*	0.077	1.000				
Effective Teacher-Child Interactions: CLASS (CLASS)	0.106*	0.077	0.303*	1.000			
Ratios and Group Sizes (RGS)	–0.030	0.061	–0.128*	–0.081	1.000		
Program Environment Rating Scales (ERS)	0.195*	–0.012	0.305*	0.324*	–0.058	1.000	
Director Qualifications (DQ)	0.351*	0.051	0.464*	0.135*	–0.078	0.149*	1.000

n = 363 centers (excludes two centers serving only infants because the element score requirements are different). Correlations are calculated using Spearman's *ρ*, a nonparametric correlation coefficient that can be interpreted in a similar way to Pearson's *r*.

* $p < .05$

Exhibit 3A.5. Correlations (Spearman's rho) Among Element Scores, FCCHs

	CO	DHS	MQ	CLASS	ERS
Child Observation (CO)	1.000				
Developmental and Health Screenings (DHS)	0.367*	1.000			
Minimum Qualifications for Lead Teacher or FCCH (MQ)	0.258*	0.228*	1.000		
Effective Teacher-Child Interactions: CLASS (CLASS)	0.095	0.155	0.031	1.000	
Program Environment Rating Scales (ERS)	0.298*	0.371*	0.197*	0.406*	1.000

n = 107. Correlations are calculated using Spearman's *ρ*, a nonparametric correlation coefficient that can be interpreted in a similar way to Pearson's *r*.

* $p < .05$

Exhibit 3A.6. Internal Consistency of Element Scores, Centers

Element Score	Correlation of Element Score and Overall Scale (Item-Test)	Correlation of Element Score and Scale With Other Six Scores (Item-Rest)	Internal Consistency Without Element
Child Observation	0.605	0.423	0.446
Developmental and Health Screenings	0.533	0.151	0.583
Minimum Qualifications for Lead Teacher or FCCH	0.644	0.419	0.431
Effective Teacher-Child Interactions: CLASS	0.507	0.303	0.488
Ratios and Group Sizes	0.160	-0.039	0.585
Program Environment Rating Scales	0.533	0.300	0.486
Director Qualifications	0.611	0.395	0.447
Internal Consistency of All 7 Element Scores (Cronbach's α)			0.537

N = 363 centers, excluding 2 centers serving only infants.

Exhibit 3A.7. Internal Consistency of Element Scores, FCCHs

Element Score	Correlation of Element Score and Overall Scale (Item-Test)	Correlation of Element Score and Scale With Other 4 Scores (Item-Rest)	Internal Consistency Without Element
Child Observation	0.666	0.399	0.564
Developmental and Health Screenings	0.742	0.487	0.512
Minimum Qualifications for Lead Teacher or FCCH	0.609	0.305	0.618
Effective Teacher-Child Interactions: CLASS	0.410	0.241	0.631
Program Environment Rating Scales	0.706	0.503	0.515
Internal Consistency of All Five Domain Scores (Cronbach's α)			0.627

N = 107 FCCHs

Exhibit 3A.8. Correlations Between Element Scores and California QRIS Ratings, Centers

Element	Correlation (*ρ*) With QRIS Rating
Child Observation	0.549*
Developmental and Health Screenings	0.459*
Minimum Qualifications for Lead Teacher or FCCH	0.569*
Effective Teacher-Child Interactions: CLASS	0.449*
Ratios and Group Sizes	0.160*
Program Environment Rating Scales	0.481*
Director Qualifications	0.529*

N = 363 centers, excluding two centers serving infants only. Correlations are calculated using Spearman's *ρ*, a nonparametric correlation coefficient that can be interpreted in a similar way to Pearson's *r*.

* $p < .05$

Exhibit 3A.9. Correlations Between Element Scores and California QRIS Ratings, FCCHs

Element	Correlation (*ρ*) With QRIS Rating
Child Observation	0.534*
Developmental and Health Screenings	0.620*
Minimum Qualifications for Lead Teacher or FCCH	0.610*
Effective Teacher-Child Interactions: CLASS	0.355*
Program Environment Rating Scales	0.624*

N = 107 FCCHs. Correlations are calculated using Spearman's *ρ*, a nonparametric correlation coefficient that can be interpreted in a similar way to Pearson's *r*.

* $p < .05$

Exhibit 3A.10. Average Element Scores by California QRIS Rating Level, Centers

California QRIS Rating	*N*	Mean Element Score						
		CO	DHS	MQ	CLASS	RGS	ERS	DQ
Tier 1	0	—	—	—	—	—	—	—
Tier 2	20	2.20	2.25	2.10	2.35	4.05	2.10	1.95
Tier 3	123	3.43	2.90	3.09	3.27	3.83	3.33	3.37
Tier 4	188	4.09	4.02	4.16	3.74	4.17	3.85	4.24
Tier 5	32	4.66	4.94	4.72	4.47	4.31	4.84	4.66

Element score name abbreviations are as follows: CO = Child Observation; DHS = Developmental and Health Screenings; MQ = Minimum Qualifications for Lead Teacher or FCCH; CLASS = Effective Teacher-Child Interactions: CLASS; RGS = Ratios and Group Sizes; ERS = Program Environment Rating Scales; DQ = Director Qualifications

Exhibit 3A.11. Average Element Scores by California QRIS Rating Level, FCCHs

California QRIS Rating	*N*	Mean Element Score				
		CO	DHS	MQ	CLASS	ERS
Tier 1	0	—	—	—	—	—
Tier 2	57	1.81	1.53	1.84	3.14	2.16
Tier 3	34	3.00	2.74	3.38	3.29	2.97
Tier 4	11	3.55	3.91	3.82	3.82	4.27
Tier 5	5	3.80	5.00	4.20	4.40	4.80

Element score name abbreviations are as follows: CO = Child Observation; DHS = Developmental and Health Screenings; MQ = Minimum Qualifications for Lead Teacher or FCCH; CLASS = Effective Teacher-Child Interactions: CLASS; RGS = Ratios and Group Sizes; ERS = Program Environment Rating Scales; DQ = Director Qualifications

Appendix 3B. Detailed Results from Analyses of QRIS Ratings and Quality Measures

Relationship Between QRIS Ratings and Independent Observations of Quality, Centers

Exhibit 3B.1. CLASS Total and Preschool Domain Scores by California QRIS Rating Level and ANOVA Results, Centers

California QRIS Rating Level	Preschool and Toddler		Preschool Domain Scores			
	CLASS Total Score	*N*	Emotional Support	Classroom Organization	Instructional Support	*N*
Tier 1	—	0	—	—	—	0
Tier 2	—	3	—	—	—	2
Tier 3	4.81 (0.50)[e]	56	5.79 (0.46)	5.36 (0.64)	2.91 (0.86)[e]	55
Tier 4	4.94 (0.69)	68	5.97 (0.69)	5.56 (0.74)	3.01 (0.86)[e]	66
Tier 5	5.39 (0.34)[c]	12	6.23 (0.50)	5.88 (0.54)	3.74 (0.70)[c, d]	12
All levels	4.92 (0.61)	139	5.92 (0.60)	5.51 (0.69)	3.03 (0.87)	135
ANOVA results	$F[3,135] = 3.40$*		$F[3,131] = 2.12$	$F[3,131] = 2.23$	$F[3,131] = 3.24$*	
Kruskall-Wallis results	$H = 12.81$**					

Cells show the mean and standard deviation for the CLASS scores at each California QRIS rating level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Note that average CLASS score data are not presented for rating levels with fewer than five observations.

Exhibit 3B.2. PQA Form A Total and Preschool Domain Scores by California QRIS Rating Level and ANOVA Results, Centers

California QRIS Rating Level	All Ages		Preschool Domain Scores				
	PQA Form A Total Score	*N*	Learning Environment	Daily Routine	Adult-Child Interaction	Curriculum Planning and Assessment	*N*
Tier 1	—	0	—	—	—	—	0
Tier 2	—	2	—	—	—	—	1
Tier 3	3.40 (0.48)	54	3.54 (0.52)	3.25 (0.59)	3.16 (0.59)[d, e]	4.09 (0.63)	53
Tier 4	3.55 (0.52)	72	3.67 (0.50)	3.30 (0.61)	3.58 (0.75)[c]	4.16 (0.52)	68
Tier 5	3.81 (0.59)	12	3.95 (0.43)	3.43 (0.65)	3.85 (0.71)[c]	3.93 (0.91)	12
All tiers	3.52 (0.52)	140	3.64 (0.51)	3.29 (0.60)	3.44 (0.72)	4.11 (0.60)	134
ANOVA results	$F[3,136] = 2.38$		$F[3,130] = 2.28$	$F[3,130] = 0.60$	$F[3,130] = 5.54$*	$F[3,130] = 0.60$	

Cells show the mean and standard deviation for the PQA scores at each California QRIS rating level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Note that average PQA score data are not presented for rating levels with fewer than five observations.

Exhibit 3B.3. PQA Form B Total and Domain Scores by California QRIS Rating Level and ANOVA Results, Centers

California QRIS Rating Level	All Ages				
	PQA Form B Total Score	Parent Involvement and Family Services	Staff Qualifications and Staff Development	Program Management	*N*
Tier 1	—	—	—	—	0
Tier 2	—	—	—	—	2
Tier 3	3.84 (0.39)	4.08 (0.52)	3.52 (0.48)	3.83 (0.45)	49
Tier 4	3.80 (0.48)	3.99 (0.60)	3.50 (0.61)	3.82 (0.54)	63
Tier 5	3.98 (0.64)	4.11 (0.80)	3.80 (0.58)	4.00 (0.64)	10
All tiers	3.83 (0.46)	4.04 (0.58)	3.54 (0.56)	3.83 (0.51)	124
ANOVA results	$F[3,120] = 0.45$	$F[3,120] = 0.40$	$F[3,120] = 0.84$	$F[3,120] = 0.94$	

Cells show the mean and standard deviation for the PQA scores at each California QRIS rating level. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Note that average PQA score data are not presented for rating levels with fewer than five observations.

Analysis of Variance Results Examining Relationships Between Element Scores and Independent Observations of Quality, Centers

Exhibit 3B.4. CLASS Total and Preschool Domain Scores by Child Observation Element Score and ANOVA Results, Centers

Element Score	Preschool and Toddler		Preschool Domain Scores			
	CLASS Total Score	*N*	Emotional Support	Classroom Organization	Instructional Support	*N*
1	—	4	—	—	—	3
2	—	4	—	—	—	3
3	4.52 (0.59)	8	5.66 (0.30)	5.09 (0.38)	2.65 (1.27)	8
4	4.96 (0.62)	100	5.93 (0.60)	5.57 (0.71)	3.09 (0.84)	98
5	4.90 (0.62)	23	5.95 (0.70)	5.40 (0.70)	2.95 (0.88)	23
All scores	4.92 (0.61)	139	5.92 (0.60)	5.51 (0.69)	3.03 (0.87)	135
ANOVA results	F[4,134] = 0.98		F[4,130] = 0.42	F[4,130] = 1.26	F[4,130] = 0.76	

Cells show the mean and standard deviation for the CLASS scores at each element score level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Note that average CLASS score data are not presented for element score levels with fewer than five observations.

Exhibit 3B.5. PQA Form A Total and Preschool Domain Scores by Child Observation Element Score and ANOVA Results, Centers

Element Score	All Ages		Preschool Domain Scores				
	PQA Form A Total Score	*N*	Learning Environment	Daily Routine	Adult-Child Interaction	Curriculum Planning and Assessment	*N*
1	—	3	—	—	—	—	2
2	—	3	—	—	—	—	2
3	3.32 (0.37)	8	3.43 (0.35)	2.95 (0.53)	3.18 (0.71)	4.24 (0.58)	8
4	3.54 (0.51)	101	3.68 (0.53)	3.31 (0.61)	3.46 (0.71)	4.24 (0.51)[e]	97
5	3.48 (0.59)	25	3.63 (0.40)	3.27 (0.6)	3.44 (0.83)	3.64 (0.65)[d]	25
All scores	3.52 (0.52)	140	3.64 (0.51)	3.29 (0.6)	3.44 (0.72)	4.11 (0.60)	134
ANOVA results	F[4,135] = 0.56		F[4,129] = 1.09	F[4,129] = 0.77	F[4,129] = 0.31	F[4,129] = 6.27***	

Cells show the mean and standard deviation for the PQA scores at each element score level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Note that average PQA score data are not presented for element score levels with fewer than five observations.

Exhibit 3B.6. PQA Form B Total and Domain Scores by Child Observation Element Score and ANOVA Results, Centers

Element Score	All Ages				
	PQA Form B Total Score	Parent Involvement and Family Services	Staff Qualifications and Staff Development	Program Management	*N*
1	—	—	—	—	3
2	—	—	—	—	4
3	3.79 (0.31)	4.13 (0.46)[e]	3.43 (0.46)	3.68 (0.41)	9
4	3.91 (0.42)[e]	4.16 (0.49)[e]	3.54 (0.52)	3.91 (0.46)	85
5	3.55 (0.60)[d]	3.55 (0.71)[c, d]	3.47 (0.76)	3.64 (0.65)	23
All scores	3.83 (0.46)	4.04 (0.58)	3.54 (0.56)	3.83 (0.51)	124
ANOVA results	F[4,119] = 3.19*	F[4,119] = 6.3***	F[4,119] = 0.64	F[4,119] = 1.82	

Cells show the mean and standard deviation for the PQA scores at each element score level. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Note that average PQA score data are not presented for element score levels with fewer than five observations.

Exhibit 3B.7. CLASS Total and Preschool Domain Scores by Developmental and Health Screening Element Score and ANOVA Results, Centers

Element Score	Preschool and Toddler		Preschool Domain Scores			
	CLASS Total Score	*N*	Emotional Support	Classroom Organization	Instructional Support	*N*
1	4.95 (0.45)	17	5.92 (0.40)	5.39 (0.73)	3.09 (0.87)	15
2	4.88 (0.59)	28	5.88 (0.62)	5.56 (0.75)	2.96 (0.73)	28
3	—	4	—	—	—	4
4	4.53 (0.71)	13	5.67 (0.85)	5.26 (0.93)	2.52 (0.75)	13
5	4.99 (0.62)	77	5.99 (0.58)	5.57 (0.62)	3.12 (0.90)	75
All scores	4.92 (0.61)	139	5.92 (0.60)	5.51 (0.69)	3.03 (0.87)	135
ANOVA results	F[4,134] = 1.66		F[4,130] = 0.95	F[4,130] = 0.92	F[4,130] = 1.54	

Cells show the mean and standard deviation for the CLASS scores at each element score level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Note that average CLASS score data are not presented for element score levels with fewer than five observations.

Exhibit 3B.8. PQA Form A Total and Preschool Domain Scores by Developmental and Health Screening Element Score and ANOVA Results, Centers

Element Score	All Ages		Preschool Domain Scores				
	PQA Form A Total Score	*N*	Learning Environment	Daily Routine	Adult-Child Interaction	Curriculum Planning and Assessment	*N*
1	3.43 (0.58)	17	3.70 (0.51)	3.18 (0.78)	3.12 (0.73)	4.06 (0.83)	15
2	3.45 (0.48)	29	3.61 (0.46)	3.20 (0.57)	3.36 (0.66)	4.19 (0.64)	28
3	—	3	—	—	—	—	3
4	3.28 (0.50)	11	3.34 (0.72)	3.14 (0.48)	3.26 (0.75)	3.97 (0.59)	11
5	3.59 (0.52)	80	3.70 (0.48)	3.36 (0.6)	3.56 (0.73)	4.10 (0.55)	77
All scores	3.52 (0.52)	140	3.64 (0.51)	3.29 (0.6)	3.44 (0.72)	4.11 (0.6)	134
ANOVA results	F[4,135] = 1.26		F[4,129] = 1.83	F[4,129] = 0.74	F[4,129] = 1.58	F[4,129] = 0.67	

Cells show the mean and standard deviation for the PQA scores at each element score level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Note that average PQA score data are not presented for element score levels with fewer than five observations.

Exhibit 3B.9. PQA Form B Total and Domain Scores by Developmental and Health Screening Element Score and ANOVA Results, Centers

Element Score	All Ages				
	PQA Form B Total Score	Parent Involvement and Family Services	Staff Qualifications and Staff Development	Program Management	*N*
1	3.74 (0.43)	3.87 (0.60)	3.60 (0.54)	3.72 (0.45)	16
2	3.67 (0.52)	3.83 (0.65)[e]	3.37 (0.62)	3.74 (0.57)	26
3	—	—	—	—	3
4	3.67 (0.43)	3.86 (0.47)	3.36 (0.60)	3.69 (0.45)	13
5	3.95 (0.41)	4.20 (0.52)[b]	3.63 (0.51)	3.91 (0.50)	66
All scores	3.83 (0.46)	4.04 (0.58)	3.54 (0.56)	3.83 (0.51)	124
ANOVA results	F[4,119] = 2.63*	F[4,119] = 2.95*	F[4,119] = 1.54	F[4,119] = 1.11	

Cells show the mean and standard deviation for the PQA scores at each element score level. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Note that average PQA score data are not presented for element score levels with fewer than five observations.

Exhibit 3B.10. CLASS Total and Preschool Domain Scores by Minimum Qualifications for Lead Teacher or FCCH Element Score and ANOVA Results, Centers

Element Score	Preschool and Toddler		Preschool Domain Scores			
	CLASS Total Score	*N*	Emotional Support	Classroom Organization	Instructional Support	*N*
1	—	3	—	—	—	3
2	4.79 (0.60)	41	5.81 (0.54)	5.45 (0.60)	2.83 (0.98)	41
3	4.77 (0.58)	19	5.85 (0.52)	5.43 (0.73)	2.78 (0.63)	18
4	4.97 (0.65)	41	5.99 (0.67)	5.49 (0.68)	3.13 (0.85)	38
5	5.11 (0.55)	35	6.05 (0.62)	5.66 (0.75)	3.28 (0.83)	35
All scores	4.92 (0.61)	139	5.92 (0.60)	5.51 (0.69)	3.03 (0.87)	135
ANOVA results	F[4,134] = 1.70		F[4,130] = 1.11	F[4,130] = 0.75	F[4,130] = 1.81	

Cells show the mean and standard deviation for the CLASS scores at each element score level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Note that average CLASS score data are not presented for element score levels with fewer than five observations.

Exhibit 3B.12. PQA Form A Total and Preschool Domain Scores by Minimum Qualifications for Lead Teacher or FCCH Element Score and ANOVA Results, Centers

Element Score	All Ages		Preschool Domain Scores				
	PQA Form A Total Score	*N*	Learning Environment	Daily Routine	Adult-Child Interaction	Curriculum Planning and Assessment	*N*
1	—	2	—	—	—	—	2
2	3.40 (0.54)	39	3.54 (0.51)	3.24 (0.64)	3.16 (0.72)[e]	4.21 (0.47)	39
3	3.67 (0.48)	18	3.73 (0.57)	3.54 (0.61)	3.63 (0.56)	4.24 (0.58)	17
4	3.50 (0.48)	45	3.66 (0.50)	3.25 (0.57)	3.49 (0.65)	4.11 (0.53)	40
5	3.61 (0.54)	36	3.70 (0.51)	3.27 (0.60)	3.64 (0.79)[b]	3.99 (0.78)	36
All scores	3.52 (0.52)	140	3.64 (0.51)	3.29 (0.60)	3.44 (0.72)	4.11 (0.60)	134
ANOVA results	F[4,135] = 1.56		F[4,129] = 0.67	F[4,129] = 0.94	F[4,129] = 3.24*	F[4,129] = 1.55	

Cells show the mean and standard deviation for the PQA scores at each element score level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Note that average PQA score data are not presented for element score levels with fewer than five observations.

Exhibit 3B.13. PQA Form B Total and Domain Scores by Minimum Qualifications for Lead Teacher or FCCH Element Score and ANOVA Results, Centers

Element Score	All Ages				
	PQA Form B Total Score	Parent Involvement and Family Services	Staff Qualifications and Staff Development	Program Management	*N*
1	—	—	—	—	2
2	3.82 (0.36)	4.10 (0.46)	3.38 (0.39)	3.84 (0.43)	35
3	3.79 (0.36)	4.07 (0.41)	3.35 (0.46)	3.83 (0.46)	18
4	3.88 (0.54)	4.08 (0.60)	3.63 (0.67)	3.85 (0.59)	40
5	3.80 (0.53)	3.87 (0.76)	3.72 (0.55)	3.78 (0.55)	29
All scores	3.83 (0.46)	4.04 (0.58)	3.54 (0.56)	3.83 (0.51)	124
ANOVA results	F[4,119] = 0.24	F[4,119] = 0.95	F[4,119] = 2.57*	F[4,119] = 0.19	

Cells show the mean and standard deviation for the PQA scores at each element score level. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Note that average PQA score data are not presented for element score levels with fewer than five observations.

Exhibit 3B.13. CLASS Total and Preschool Domain Scores by Effective Teacher-Child Interactions Element Score and ANOVA Results, Centers

Element Score	Preschool and Toddler		Preschool Domain Scores			
	CLASS Total Score	*N*	Emotional Support	Classroom Organization	Instructional Support	*N*
1	—	1	—	—	—	0
2	—	2	—	—	—	2
3	4.69 (0.59)[d, e]	85	5.75 (0.60)[d, e]	5.31 (0.67)[d, e]	2.76 (0.83)[d, e]	84
4	5.22 (0.38)[c]	16	6.22 (0.41)[c]	5.78 (0.47)[c]	3.34 (0.71)[c]	16
5	5.35 (0.42)[c]	35	6.23 (0.52)[c]	5.93 (0.58)[c]	3.59 (0.71)[c]	33
All scores	4.92 (0.61)	139	5.92 (0.60)	5.51 (0.69)	3.03 (0.87)	135
ANOVA results	F[4,134] = 11.16***		F[3,131] = 7.60***	F[3,131] = 9.77***	F[3,131] = 9.84***	

Cells show the mean and standard deviation for the CLASS scores at each element score level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Note that average CLASS score data are not presented for element score levels with fewer than five observations.

Exhibit 3B.14. PQA Form A Total and Preschool Domain Scores by Effective Teacher-Child Interactions Element Score and ANOVA Results, Centers

Element Score	All Ages		Preschool Domain Scores				
	PQA Form A Total Score	*N*	Learning Environment	Daily Routine	Adult-Child Interaction	Curriculum Planning and Assessment	*N*
1	—	1	—	—	—	—	0
2	—	2	—	—	—	—	2
3	3.40 (0.52)[e]	84	3.52 (0.51)[e]	3.21 (0.59)	3.28 (0.75)[e]	4.02 (0.59)[e]	83
4	3.61 (0.50)	17	3.75 (0.53)	3.34 (0.64)	3.54 (0.65)	4.00 (0.64)	16
5	3.77 (0.43)[c]	35	3.92 (0.40)[c]	3.46 (0.61)	3.78 (0.58)[c]	4.44 (0.49)[b, c]	33
All scores	3.52 (0.52)	139	3.64 (0.51)	3.29 (0.60)	3.44 (0.72)	4.11 (0.60)	134
ANOVA results	F[4,134] = 3.6**		F[3,130] = 5.74***	F[3,130] = 1.42	F[3,130] = 4.14**	F[3,130] = 5.74***	

Cells show the mean and standard deviation for the PQA scores at each element score level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Note that average PQA score data are not presented for element score levels with fewer than five observations.

Exhibit 3B.15. PQA Form B Total and Domain Scores by Effective Teacher-Child Interactions Element Score and ANOVA Results, Centers

Element Score	All Ages				
	PQA Form B Total Score	Parent Involvement and Family Services	Staff Qualifications and Staff Development	Program Management	*N*
1	—	—	—	—	1
2	—	—	—	—	2
3	3.76 (0.48)	3.97 (0.61)	3.46 (0.56)	3.75 (0.54)	75
4	3.93 (0.50)	4.13 (0.59)	3.63 (0.58)	3.91 (0.48)	13
5	3.98 (0.39)	4.17 (0.52)	3.69 (0.54)	3.99 (0.43)	32
All scores	3.84 (0.46)	4.05 (0.58)	3.54 (0.56)	3.83 (0.51)	123
ANOVA results	F[4,118] = 1.56	F[4,118] = 0.92	F[4,118] = 1.37	F[4,118] = 1.54	

Cells show the mean and standard deviation for the PQA scores at each element score level. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Note that average PQA score data are not presented for element score levels with fewer than five observations.

Exhibit 3B.16. CLASS Total and Preschool Domain Scores by Ratios and Group Size Element Score and ANOVA Results, Centers

Element Score	Preschool and Toddler		Preschool Domain Scores			
	CLASS Total Score	*N*	Emotional Support	Classroom Organization	Instructional Support	*N*
1	—	0	—	—	—	0
2	4.78 (0.31)	8	5.83 (0.34)	5.38 (0.42)	2.79 (0.53)	8
3	5.29 (0.56)	13	6.27 (0.58)	5.73 (0.75)	3.39 (0.93)	12
4	4.91 (0.58)	82	5.93 (0.55)	5.50 (0.65)	3.05 (0.85)	80
5	4.84 (0.69)	36	5.80 (0.72)	5.46 (0.81)	2.91 (0.94)	35
All scores	4.92 (0.61)	139	5.92 (0.60)	5.51 (0.69)	3.03 (0.87)	135
ANOVA results	F[3,135] = 1.96		F[3,131] = 1.95	F[3,131] = 0.54	F[3,131] = 1.12	

Cells show the mean and standard deviation for the CLASS scores at each element score level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Exhibit 3B.17. PQA Form A Total and Preschool Domain Scores by Ratios and Group Size Element Score and ANOVA Results, Centers

Element Score	All Ages		Preschool Domain Scores				
	PQA Form A Total Score	*N*	Learning Environment	Daily Routine	Adult-Child Interaction	Curriculum Planning and Assessment	*N*
1	—	0	—	—	—	—	0
2	3.74 (0.40)	7	3.67 (0.63)	3.59 (0.51)	3.53 (0.44)	4.44 (0.36)	7
3	3.53 (0.49)	13	3.61 (0.43)	3.36 (0.70)	3.61 (0.66)	3.93 (0.60)	12
4	3.52 (0.52)	82	3.68 (0.49)	3.28 (0.59)	3.42 (0.74)	4.16 (0.60)	80
5	3.45 (0.54)	38	3.57 (0.56)	3.22 (0.61)	3.41 (0.76)	4.01 (0.62)	35
All scores	3.52 (0.52)	139	3.64 (0.51)	3.29 (0.60)	3.44 (0.72)	4.11 (0.60)	134
ANOVA results	F[3,136] = 0.62		F[3,130] = 0.36	F[3,130] = 0.76	F[3,130] = 0.31	F[3,130] = 1.59	

Cells show the mean and standard deviation for the PQA scores at each element score level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Exhibit 3B.18. PQA Form B Total and Domain Scores by Ratios and Group Size Element Score and ANOVA Results, Centers

Element Score	All Ages				
	PQA Form B Total Score	Parent Involvement and Family Services	Staff Qualifications and Staff Development	Program Management	*N*
1	—	—	—	—	0
2	3.75 (0.31)	3.96 (0.47)	3.49 (0.46)	3.70 (0.33)	7
3	4.17 (0.53)	4.21 (0.62)	4.13 (0.64)[d, e]	4.13 (0.68)	7
4	3.82 (0.46)	4.03 (0.60)	3.52 (0.57)[c]	3.80 (0.49)	76
5	3.82 (0.45)	4.04 (0.56)	3.45 (0.45)[c]	3.87 (0.54)	34
All scores	3.83 (0.46)	4.04 (0.58)	3.54 (0.56)	3.83 (0.51)	124
ANOVA results	F[3,120] = 1.38	F[3,120] = 0.24	F[3,120] = 3.12*	F[3,120] = 1.15	

Cells show the mean and standard deviation for the PQA scores at each element score level. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Exhibit 3B.19. CLASS Total and Preschool Domain Scores by Program Environment Rating Scale Element Score and ANOVA Results, Centers

Element Score	Preschool and Toddler		Preschool Domain Scores			
	CLASS Total Score	*N*	Emotional Support	Classroom Organization	Instructional Support	*N*
1	—	0	—	—	—	0
2	4.76 (0.58)[e]	15	5.87 (0.63)	5.50 (0.66)	2.67 (0.71)[e]	15
3	4.73 (0.66)[e]	60	5.73 (0.64)[e]	5.31 (0.67)[e]	2.88 (0.96)[e]	57
4	4.94 (0.54)	23	6.04 (0.54)	5.53 (0.79)	2.91 (0.82)	23
5	5.24 (0.42)[b, c]	41	6.15 (0.46)[c]	5.77 (0.59)[c]	3.45 (0.66)[b, c]	40
All scores	4.92 (0.61)	139	5.92 (0.60)	5.51 (0.69)	3.03 (0.87)	135
ANOVA results	F[3,135] = 7.14***		F[3,131] = 4.55**	F[3,131] = 3.67*	F[3,131] = 5.11**	

Cells show the mean and standard deviation for the CLASS scores at each element score level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Exhibit 3B.20. PQA Form A Total and Preschool Domain Scores by Program Environment Rating Scale Element Score and ANOVA Results, Centers

Element Score	All Ages		Preschool Domain Scores				
	PQA Form A Total Score	*N*	Learning Environment	Daily Routine	Adult-Child Interaction	Curriculum Planning and Assessment	*N*
1	—	0	—	—	—	—	0
2	3.41 (0.28)	13	3.47 (0.43)[e]	3.29 (0.37)	3.27 (0.49)	4.12 (0.36)	13
3	3.35 (0.52)[e]	61	3.54 (0.51)[e]	3.17 (0.62)	3.20 (0.74)[e]	4.01 (0.62)	57
4	3.47 (0.57)	21	3.50 (0.54)[e]	3.19 (0.68)	3.39 (0.84)	4.00 (0.57)	20
5	3.79 (0.43)[c]	45	3.89 (0.43)[b, c, d]	3.48 (0.57)	3.82 (0.55)[c]	4.30 (0.62)	44
All scores	3.52 (0.52)	140	3.64 (0.51)	3.29 (0.60)	3.44 (0.72)	4.11 (0.60)	134
ANOVA results	F[3,136] = 7.46***		F[3,130] = 5.83***	F[3,130] = 2.48	F[3,130] = 7.1***	F[3,130] = 2.21	

Cells show the mean and standard deviation for the PQA scores at each element score level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Exhibit 3B.21. PQA Form B Total and Domain Scores by Program Environment Rating Scale Element Score and ANOVA Results, Centers

Element Score	All Ages				
	PQA Form B Total Score	Parent Involvement and Family Services	Staff Qualifications and Staff Development	Program Management	*N*
1	—	—	—	—	0
2	3.74 (0.47)	3.98 (0.57)	3.41 (0.54)	3.74 (0.49)	12
3	3.78 (0.48)	4.01 (0.64)	3.50 (0.59)	3.74 (0.49)	56
4	3.85 (0.47)	4.04 (0.55)	3.63 (0.59)	3.80 (0.58)	19
5	3.93 (0.43)	4.10 (0.53)	3.59 (0.49)	4.00 (0.48)	37
All scores	3.83 (0.46)	4.04 (0.58)	3.54 (0.56)	3.83 (0.51)	124
ANOVA results	F[3,120] = 0.91	F[3,120] = 0.23	F[3,120] = 0.6	F[3,120] = 2.17	

Cells show the mean and standard deviation for the PQA scores at each element score level. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Note that average PQA score data are not reliable for element score levels with fewer than five observations.

Exhibit 3B.22. CLASS Total and Preschool Domain Scores by Director Qualifications Element Score and ANOVA Results, Centers

Element Score	Preschool and Toddler		Preschool Domain Scores			
	CLASS Total Score	*N*	Emotional Support	Classroom Organization	Instructional Support	*N*
1	—	0	—	—	—	0
2	4.80 (0.54)	26	5.83 (0.48)	5.37 (0.64)	2.90 (0.85)	25
3	5.16 (0.40)[e]	33	6.08 (0.50)	5.72 (0.58)[e]	3.30 (0.60)	32
4	4.98 (0.61)	45	6.00 (0.53)	5.63 (0.71)	3.11 (0.94)	44
5	4.70 (0.72)[c]	35	5.73 (0.78)	5.24 (0.71)[c]	2.78 (0.94)	34
All scores	4.92 (0.61)	139	5.92 (0.60)	5.51 (0.69)	3.03 (0.87)	135
ANOVA results	F[3,135] = 4.09**		F[3,131] = 2.43	F[3,131] = 3.73*	F[3,131] = 2.34	

Cells show the mean and standard deviation for the CLASS scores at each element score level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Exhibit 3B.23. PQA Form A Total and Preschool Domain Scores by Director Qualifications Element Score and ANOVA Results, Centers

Element Score	All Ages		Preschool Domain Scores				
	PQA Form A Total Score	*N*	Learning Environment	Daily Routine	Adult-Child Interaction	Curriculum Planning and Assessment	*N*
1	—	0	—	—	—	—	0
2	3.45 (0.53)	22	3.59 (0.57)	3.33 (0.64)	3.15 (0.65)	4.15 (0.53)	21
3	3.63 (0.45)	34	3.74 (0.47)	3.33 (0.57)	3.58 (0.68)	4.30 (0.48)	33
4	3.56 (0.52)	46	3.73 (0.48)	3.30 (0.63)	3.52 (0.70)	4.10 (0.64)	44
5	3.41 (0.54)	38	3.48 (0.52)	3.21 (0.60)	3.38 (0.80)	3.94 (0.67)	36
All scores	3.52 (0.52)	140	3.64 (0.51)	3.29 (0.60)	3.44 (0.72)	4.11 (0.60)	134
ANOVA results	F[3,136] = 1.3		F[3,130] = 2.18	F[3,130] = 0.29	F[3,130] = 1.84	F[3,130] = 2.18	

Cells show the mean and standard deviation for the PQA scores at each element score level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Exhibit 3B.24. PQA Form B Total and Domain Scores by Director Qualifications Element Score and ANOVA Results, Centers

Element Score	All Ages				
	PQA Form B Total Score	Parent Involvement and Family Services	Staff Qualifications and Staff Development	Program Management	*N*
1	—	—	—	—	0
2	3.82 (0.26)	4.17 (0.33)	3.41 (0.36)	3.74 (0.44)	19
3	3.92 (0.41)	4.13 (0.48)	3.55 (0.54)	3.97 (0.50)	31
4	3.86 (0.43)	4.06 (0.62)	3.61 (0.45)	3.82 (0.47)	42
5	3.72 (0.61)	3.85 (0.71)	3.51 (0.76)	3.76 (0.59)	32
All scores	3.83 (0.46)	4.04 (0.58)	3.54 (0.56)	3.83 (0.51)	124
ANOVA results	F[3,120] = 1.03	F[3,120] = 1.75	F[3,120] = 0.59	F[3,120] = 1.22	

Cells show the mean and standard deviation for the PQA scores at each element score level. For ANOVA *F* test results (indicating significant differences across element score levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual element score levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows: [a] differs from level 1; [b] differs from level 2; [c] differs from level 3; [d] differs from level 4; [e] differs from level 5.

Appendix 3C. Detailed Results from Analyses of QRIS Ratings and Children's Outcomes

Descriptive Statistics for the Child Outcomes Analysis Sample

Exhibit 3C.1. Site-Level Characteristics of Programs in the Child Outcomes Analysis Sample

Characteristic	Centers with Tier Rating (*N*=113)				Centers and FCCHs with Tier Rating (*N*=132)			
	2	3	4	5	2	3	4	5
Site Characteristics								
Serves infant and toddler (%)	60.00	27.50	15.25	11.11	27.78	88.89	98.33	100.00
Language other than English (%)	80.00	80.00	79.66	77.78	72.22	11.11	1.67	0.00
Use Spanish (%)	60.00	75.00	76.27	77.78	77.78	31.11	16.67	11.11
Funding Stream					88.89	75.56	80.00	77.78
First 5, CSP1, or CSP 2 (%)	20.00	30.00	54.24	66.67	61.11	68.89	76.67	77.78
Title 5 (%)	20.00	55.00	69.49	66.67				
Fed Head Start, Early Head Start %)	20.00	57.50	40.68	33.33	5.56	31.11	53.33	66.67
Subsidy Vouchers (%)	60.00	15.00	15.25	0.00	5.56	48.89	68.33	66.67
Private Pay (%)	0.00	10.00	5.08	0.00	11.11	53.33	40.00	33.33
Mean enrollment mean	27.20	61.65	50.36	60.89	61.11	17.78	16.67	0.00
(s.d.)	*(14.53)*	*(29.98)*	*(25.13)*	*(41.72)*	72.22	31.11	10.00	0.00

Exhibit 3C.2. Child Demographic Characteristics and Assessment Scores Among Children in the Child Outcomes Analysis Sample

Percentage of Children With Characteristic, by Rating Level	Centers with Tier Rating					Centers and FCCHs with Tier Rating				
	2	3	4	5	*N*	2	3	4	5	*N*
Student Demographics										
Male	46.67	50.54	50.12	48.99	1552	47.56	50.80	50.18	48.99	1611
Special needs	11.11	8.99	8.95	11.41	1552	10.98	9.50	8.94	11.41	1611
English as home language	33.33	33.45	27.08	27.52	1552	36.59	34.50	27.17	27.52	1611
Spanish as home language	26.67	29.86	37.75	41.61	1552	24.39	29.10	37.70	41.61	1611
Other as home language	8.89	5.22	6.25	6.04	1552	6.10	5.20	6.24	6.04	1611
Mean and Standard Deviation of Scores, by Rating Level										
Fall Scores										
preLAS	11.58	12.86	11.86	12.11	1552	12.66	12.98	11.86	12.11	1611
	(6.78)	*(6.06)*	*(6.36)*	*(6.06)*		*(6.71)*	*(6.04)*	*(6.36)*	*(6.06)*	
Story and Print Concepts	3.51	3.34	3.31	3.37	1552	3.56	3.37	3.31	3.37	1611
	(2.18)	*(2.13)*	*(2.15)*	*(2.09)*		*(2.22)*	*(2.13)*	*(2.15)*	*(2.09)*	
Peg Tapping Task	4.71	6.47	6.44	6.05	1552	5.84	6.49	6.43	6.05	1611
	(3.97)	*(4.89)*	*(4.92)*	*(4.70)*		*(4.78)*	*(4.91)*	*(4.92)*	*(4.70)*	
WJ Letter Word ID	4.59	4.47	4.44	4.55	1523	4.68	4.47	4.44	4.55	1581
	(1.15)	*(1.12)*	*(1.13)*	*(1.04)*		*(1.14)*	*(1.11)*	*(1.13)*	*(1.04)*	
WJ Applied Problems	3.25	3.29	3.23	3.26	1511	3.34	3.31	3.23	3.26	1569
	(0.93)	*(0.91)*	*(0.87)*	*(0.79)*		*(0.96)*	*(0.91)*	*(0.87)*	*(0.79)*	
Spring Scores										
preLAS	14.89	15.43	14.82	15.13	1552	15.13	15.50	14.83	15.13	1611
	(5.42)	*(4.84)*	*(5.23)*	*(4.73)*		*(5.47)*	*(4.84)*	*(5.23)*	*(4.73)*	
Story and Print Concepts	4.93	4.52	4.41	4.87	1552	4.95	4.55	4.40	4.87	1611
	(2.04)	*(2.28)*	*(2.26)*	*(2.37)*		*(2.23)*	*(2.27)*	*(2.26)*	*(2.37)*	
Peg Tapping Task	7.69	9.01	8.70	9.43	1552	8.55	9.05	8.69	9.43	1611
	(5.19)	*(5.33)*	*(5.46)*	*(5.32)*		*(5.56)*	*(5.33)*	*(5.47)*	*(5.32)*	
WJ Letter Word Identification	5.19	5.04	5.04	5.31	1523	5.23	5.05	5.04	5.31	1581
	(0.82)	*(0.96)*	*(1.01)*	*(0.85)*		*(0.80)*	*(0.95)*	*(1.00)*	*(0.85)*	
WJ Applied Problems	3.73	3.77	3.70	3.78	1511	3.78	3.78	3.70	3.78	1569
	(0.76)	*(0.78)*	*(0.79)*	*(0.63)*		*(0.79)*	*(0.78)*	*(0.79)*	*(0.63)*	

Exhibit 3C.3. Element Scores and California QRIS Ratings Among Programs in the Child Outcomes Analysis Sample

Element	Percentage of Centers (*N*=113) With Element Score or Rating					Percentage of Centers and FCCHs (*N*=132) With Element Score or Rating				
	1	2	3	4	5	1	2	3	4	5
Child Observation (CO)	2.7	2.7	7.21	75.68	11.71	9.23	4.62	6.92	69.23	10.00
Developmental and Health Screenings (DHS)	13.51	20.72	3.6	11.71	50.45	18.46	22.31	3.85	10.77	44.62
Minimum Qualifications for Lead Teacher or FCCH (MQ)	0.9	33.33	15.32	27.93	22.52	6.92	33.85	13.85	25.38	20.00
Effective Teacher-Child Interactions: CLASS (CLASS)	0.88	1.77	46.02	20.35	30.97	1.52	1.52	49.24	18.94	28.79
Ratios and Group Sizes (RGS)	0.88	4.42	7.96	53.98	32.74	0.88	4.42	7.96	53.98	32.74
Program Environment Rating Scales (ERS)	0.88	9.73	39.82	16.81	32.74	0.76	12.12	39.39	16.67	31.06
Director Qualifications (DQ)	0.90	15.32	23.42	36.94	23.42	0.90	15.32	23.42	36.94	23.42
California QRIS Rating	0.00	4.42	35.4	52.21	7.96	0.00	13.64	34.09	45.45	6.82

Multilevel Regression Model Results Examining Relationships Between QRIS Ratings and Child Outcomes

Exhibit 3C.4. Associations Between Programs' QRIS Ratings and Child Outcomes, Centers Only

	Child Outcomes, Spring 2015			
	Story and Print Concepts	Peg Tapping Task	Letter Word Identification	Applied Problems
QRIS Rating				
Tier 2	1.03**	0.21	0.23‡	0.05
Tier 4	0.16	-0.25	0.08	0.00
Tier 5	0.41	0.86	0.15‡	0.09
Site Characteristics				
First 5 Funding	0.34	0.72	0.10	-0.06
Title 5 Program	-0.21	-0.71**	0.02	-0.08*
Head Start Program	-0.07	-0.51‡	0.11	-0.12**
Private pay Children	0.50	-0.04	0.04	0.03
Voucher pay Children	-0.14*	0.42	0.02	-0.20
Total site enrollment	0.00	0.00	0.00	0.00‡
Toddler and Infant enrolled	-0.67*	-0.23	-0.03	-0.11
Child Characteristics				
Male	-0.27**	-0.02	-0.07‡	0.01
Special needs	-0.53**	-1.29**	-0.22**	-0.13*
Spanish home language	0.51**	0.44	0.05	0.12*
Eng/Spanish home language	0.13	-0.01	-0.06‡	0.00
Other home language	0.25	0.23	0.40**	0.11
Fall score	0.32**	0.43**	0.52**	0.59**
Age at fall assessment	0.83**	2.19**	--	--
Days between assessments	0.00	-0.01	0.00	0.00
preLAS fall score	0.11**	0.18**	0.04**	0.02**
Model R^2	0.43	0.38	0.55	0.52

‡ $p < .10$, * $p < .05$; ** $p < .01$. N = 1511 to 1552 children

NOTE: Sites with a rating of 3 were the reference category

Exhibit 3C.5. Associations Between Programs' QRIS Ratings and Child Outcomes, All Programs

	Child Outcomes, Spring 2015			
	Story and Print Concepts	**Peg Tapping Task**	**Letter Word Identification**	**Applied Problems**
QRIS Rating				
Tier 2	0.85**	0.47	0.14	0.06
Tier 4	0.14	-0.24	0.08	0.01
Tier 5	0.40	0.93‡	0.14‡	0.10
Site Characteristics				
First 5 Funding	0.30	0.72	0.09	-0.06
Title 5 Program	-0.23‡	-0.67**	0.01	-0.08*
Head Start Program	-0.10	-0.53‡	0.11	-0.12**
Private pay Children	0.42*	-0.05	0.05	0.02
Voucher pay Children	-0.07	0.40	0.06	-0.21*
Center	0.02	-0.05	0.02	0.16*
Total site enrollment	0.00	0.00	0.00	0.00‡
Toddler and Infant enrolled	-0.68**	-0.27	-0.04	-0.10
Child Characteristics				
Male	-0.28**	-0.06	-0.08*	0.00
Special needs	-0.49**	-1.22**	-0.21**	-0.13*
Spanish home language	0.53**	0.46	0.05	0.13**
Eng/Spanish home language	0.15	-0.06	-0.07**	0.00
Other home language	0.21	0.21	0.40**	0.10
Fall score	0.33**	0.43**	0.52**	0.59**
Age at fall assessment	0.84**	2.21**	-	-
Days between assessments	-0.01	-0.01	0.00	0.00
preLAS fall score	0.11**	0.18**	0.04**	0.02**
Model R^2	0.44	0.39	0.55	0.53

‡ $p < .10$, * $p < .05$; ** $p < .01$. N =1569 to 1611 children

NOTE: Sites with a rating of 3 were the reference category

Multilevel Regression Model Results Examining Relationships Between Element Scores and Child Outcomes

Exhibit 3C.6. Associations Between Child Observation Element Scores and Child Outcomes, Centers Only

	Child Outcomes, Spring 2015			
	Story and Print Concepts	Peg Tapping Task	Letter Word Identification	Applied Problems
Child Observation Score				
1 or 2 points	1.13**	0.39	0.16	0.05
4 points	0.07	-0.51	-0.07	-0.03
5 points	0.12	-1.35**	-0.22	-0.07
Site Characteristics				
First 5 Funding	0.32	0.82‡	0.12	-0.06
Title 5 Program	-0.19	-0.57*	0.04	-0.07‡
Head Start Program	0.06	-0.42	0.13	-0.11*
Private pay Children	0.02	-0.22	-0.07	0.00
Voucher pay Children	-0.02	0.14	0.01	-0.21*
Total site enrollment	0.00	0.00	0.00	0.00*
Toddler and Infant enrolled	-0.24	0.40	0.13	-0.06
Child Characteristics				
Male	-0.28**	-0.02	-0.07‡	0.01
Special needs	-0.52**	-1.26**	-0.22**	-0.12*
Spanish home language	0.51**	0.45	0.06	0.12*
Eng/Spanish home language	0.15	0.01	-0.05	0.00
Other home language	0.28	0.20	0.41**	0.11
Fall score	0.32**	0.43**	0.52**	0.59**
Age at fall assessment	0.85**	2.21**	-	-
Days between assessments	0.00	-0.02	0.00	0.00
preLAS fall score	0.11**	0.18**	0.04**	0.02**
Model R^2	0.43	0.38	0.55	0.52

‡ $p < .10$, * $p < .05$; ** $p < .01$. N = 1511 to 1552 children

NOTE: Sites 3 points were the reference category

Exhibit 3C.7. Associations Between Developmental and Health Screenings Element Scores and Child Outcomes, Centers Only

	Child Outcomes, Spring 2015			
	Story and Print Concepts	**Peg Tapping Task**	**Letter Word Identification**	**Applied Problems**
Developmental and Health Screenings Score				
1 or 2 points	0.14	0.43	0.12	0.08
4 points	-0.17	-1.10*	0.09	0.00
5 points	0.39	0.07	0.14	0.03
Site Characteristics				
First 5 Funding	0.29	0.68	0.08	-0.06
Title 5 Program	-0.37*	-0.79**	0.00	-0.07‡
Head Start Program	-0.09	-0.35	0.13‡	-0.10*
Private pay Children	0.42*	-0.22	0.00	0.00
Voucher pay Children	0.10	0.56	0.09	-0.18*
Total site enrollment	0.00	0.00	0.00	0.00*
Toddler and Infant enrolled	-0.46‡	0.17	0.02	-0.08
Child Characteristics				
Male	-0.28**	-0.05	-0.07‡	0.00
Special needs	-0.52**	-1.27**	-0.22**	-0.12*
Spanish home language	0.50**	0.39	0.04	0.12*
Eng/Spanish home language	0.13	-0.06	-0.06‡	0.00
Other home language	0.28	0.16	0.40**	0.10
Fall score	0.32**	0.43**	0.52**	0.59**
Age at fall assessment	0.83**	2.22**	-	-
Days between assessments	0.00	-0.02‡	0.00	0.00‡
preLAS fall score	0.11**	0.18**	0.04**	0.02**
Model R^2	0.43	0.39	0.55	0.52

‡ $p < .10$, * $p < .05$; ** $p < .01$. N = 1511 to 1552 children

NOTE: Sites with 3 points were the reference category

Exhibit 3C.8. Associations Between Minimum Qualifications for Lead Teacher Element Scores and Child Outcomes, Centers Only

	Child Outcomes, Spring 2015			
	Story and Print Concepts	**Peg Tapping Task**	**Letter Word Identification**	**Applied Problems**
Minimum Quaifications for Lead Teacher Score				
1 or 2 points	0.00	0.06	-0.14‡	-0.07
4 points	0.21	0.45	-0.08	0.03
5 points	0.39	1.82**	0.05	0.11
Site Characteristics				
First 5 Funding	0.37	1.04*	0.13	-0.01
Title 5 Program	-0.29*	-0.88**	0.02	-0.07*
Head Start Program	-0.11	-0.69*	0.13‡	-0.13**
Private pay Children	0.33	-0.23	0.03	0.03
Voucher pay Children	0.06	0.36	0.09	-0.16
Total site enrollment	0.00	0.01*	0.00‡	0.00‡
Toddler and Infant enrolled	-0.43	0.14	0.01	-0.08
Child Characteristics				
Male	-0.28**	-0.03	-0.07‡	0.01
Special needs	-0.52**	-1.27**	-0.22**	-0.12*
Spanish home language	0.51**	0.51	0.05	0.12*
Eng/Spanish home language	0.14	0.01	-0.06‡	0.00
Other home language	0.26	0.24	0.41**	0.10
Fall score	0.33**	0.42**	0.52**	0.59**
Age at fall assessment	0.83**	2.13**	-	-
Days between assessments	0.00	-0.01	0.00	0.00
preLAS fall score	0.11**	0.18**	0.04**	0.02**
Model R^2	0.43	0.39	0.55	0.52

‡ $p < .10$, * $p < .05$; ** $p < .01$. N = 1511 to 1552 children

NOTE: Sites with 3 points were the reference category

Exhibit 3C.9. Associations Between Effective Teacher–Child Interactions Element Scores and Child Outcomes, Centers Only

	Child Outcomes, Spring 2015			
	Story and Print Concepts	Peg Tapping Task	Letter Word Identification	Applied Problems
Effective Teacher-Child Interactions Score				
1 or 2 points	-0.12	1.48*	-0.10	-0.06
4 points	-0.08	0.19	0.04	-0.04
5 points	0.08	0.63‡	0.04	-0.01
Site Characteristics				
First 5 Funding	0.27	0.59	0.09	-0.07
Title 5 Program	-0.28‡	-0.61*	0.01	-0.08*
Head Start Program	-0.02	-0.37	0.12	-0.10*
Private pay Children	0.35	0.08	-0.02	0.02
Voucher pay Children	0.04	0.28	0.09	-0.19**
Total site enrollment	0.00	0.00	0.00	0.00*
Toddler and Infant enrolled	-0.46	-0.15	0.03	-0.09
Child Characteristics				
Male	-0.27**	-0.03	-0.07‡	0.01
Special needs	-0.53**	-1.31**	-0.22**	-0.13*
Spanish home language	0.50**	0.43	0.04	0.12*
Eng/Spanish home language	0.14	-0.03	-0.07‡	0.00
Other home language	0.27	0.24	0.41**	0.11
Fall score	0.33**	0.43**	0.52**	0.59**
Age at fall assessment	0.83**	2.21**	-	-
Days between assessments	0.00	-0.02	0.00	0.00
preLAS fall score	0.11**	0.18**	0.04**	0.02**
Model R^2	0.43	0.39	0.55	0.52

‡ $p < .10$, * $p < .05$; ** $p < .01$. N = 1511 to 1552 children

NOTE: Sites with 3 points were the reference category

Exhibit 3C.10. Associations Between Ratios and Group Sizes Element Scores and Child Outcomes, Centers Only

	Child Outcomes, Spring 2015			
	Story and Print Concepts	**Peg Tapping Task**	**Letter Word Identification**	**Applied Problems**
Ratios and Group Sizes Score				
1 or 2 points	0.05	-0.22	-0.18	-0.24**
4 points	0.47	0.05	0.03	-0.10
5 points	0.56‡	0.17	0.06	-0.07
Site Characteristics				
First 5 Funding	0.42‡	0.62	0.09	-0.10‡
Title 5 Program	-0.22	-0.71**	0.01	-0.09*
Head Start Program	-0.03	-0.42	0.11	-0.14**
Private pay Children	0.57**	0.06	0.03	0.02
Voucher pay Children	0.01	0.42	0.04	-0.22*
Total site enrollment	0.00	0.00	0.00	0.00
Toddler and Infant enrolled	-0.43	-0.10	0.04	-0.08
Child Characteristics				
Male	-0.28**	-0.03	-0.07‡	0.00
Special needs	-0.53**	-1.28**	-0.22**	-0.12*
Spanish home language	0.50**	0.42	0.05	0.12*
Eng/Spanish home language	0.13	-0.03	-0.06	0.00
Other home language	0.27	0.19	0.41**	0.11
Fall score	0.32**	0.43**	0.52**	0.59**
Age at fall assessment	0.84**	2.19**	-	-
Days between assessments	0.00	-0.01	0.00	0.00
preLAS fall score	0.11**	0.18**	0.04**	0.02**
Model R^2	0.43	0.38	0.55	0.52

‡ $p < .10$, * $p < .05$; ** $p < .01$. N = 1511 to 1552 children

NOTE: Sites with 3 points were the reference category

Exhibit 3C.11. Associations Between Program Environment Rating Scales Element Scores and Child Outcomes, Centers Only

	Child Outcomes, Spring 2015			
	Story and Print Concepts	**Peg Tapping Task**	**Letter Word Identification**	**Applied Problems**
Environment Rating Scales Score				
1 or 2 points	0.07	0.88*	-0.07	0.08
4 points	0.33*	0.51‡	-0.03	-0.01
5 points	-0.29‡	-0.42	0.02	0.03
Site Characteristics				
First 5 Funding	0.38	1.00‡	0.05	-0.05
Title 5 Program	-0.30*	-0.69*	0.01	-0.07
Head Start Program	-0.03	-0.23	0.12	-0.09*
Private pay Children	0.33‡	0.01	-0.01	0.04
Voucher pay Children	0.02	0.32	0.08	-0.21*
Total site enrollment	0.00	0.00	0.00	0.00
Toddler and Infant enrolled	-0.38	-0.09	0.02	-0.12
Child Characteristics				
Male	-0.28*	-0.02	-0.07‡	0.01
Special needs	-0.53**	-1.33**	-0.21**	-0.13*
Spanish home language	0.48**	0.36	0.05	0.12*
Eng/Spanish home language	0.11	-0.07	-0.06‡	0.00
Other home language	0.25	0.15	0.40**	0.11
Fall score	0.33**	0.43**	0.52**	0.59**
Age at fall assessment	0.83**	2.19**	-	-
Days between assessments	0.00	-0.01	0.00	0.00
preLAS fall score	0.11**	0.17**	0.04**	0.02**
Model R^2	0.43	0.38	0.55	0.52

‡ $p < .10$, * $p < .05$; ** $p < .01$. N = 1511 to 1552 children

NOTE: Sites with 3 points were the reference category

Exhibit 3C.12. Associations Between Director Qualifications Element Scores and Child Outcomes, Centers Only

	Child Outcomes, Spring 2015			
	Story and Print Concepts	**Peg Tapping Task**	**Letter Word Identification**	**Applied Problems**
Director Qualifications Score				
1 or 2 points	0.47*	0.64	0.12	-0.12‡
4 points	0.08	0.63‡	0.10	-0.02
5 points	0.08	0.67	0.25*	0.07
Site Characteristics				
First 5 Funding	0.27	0.64	0.04	-0.09
Title 5 Program	-0.34*	-0.72**	0.01	-0.06
Head Start Program	0.00	-0.29	0.14*	-0.12**
Private pay Children	0.33‡	0.02	0.00	0.05
Voucher pay Children	-0.01	0.72	0.15	-0.16‡
Total site enrollment	0.00	0.00	0.00*	0.00**
Toddler and Infant enrolled	-0.45	-0.27	-0.05	-0.15
Child Characteristics				
Male	-0.28**	-0.05	-0.07‡	0.01
Special needs	-0.52**	-1.24**	-0.21**	-0.12*
Spanish home language	0.48**	0.38	0.04	0.12*
Eng/Spanish home language	0.12	-0.06	-0.07‡	0.00
Other home language	0.26	0.18	0.39**	0.10
Fall score	0.33**	0.43**	0.52**	0.59**
Age at fall assessment	0.83**	2.16**	-	-
Days between assessments	0.00	-0.01	0.00	0.00‡
preLAS fall score	0.11**	0.18**	0.04**	0.02**
Model R^2	0.43	0.38	0.55	0.52

‡ $p < .10$, * $p < .05$; ** $p < .01$. N = 1511 to 1552 children

NOTE: Sites with 3 points were the reference category

Exhibit 3C.13. Associations Between Program QRIS Total Score (Sum of Element Scores) and Child Outcomes, Centers Only

	Child Outcomes, Spring 2015			
	Story and Print Concepts	**Peg Tapping Task**	**Letter Word Identification**	**Applied Problems**
QRIS Total Score				
QRIS total Score	0.00	-0.01	0.00	0.00
Site Characteristics				
First 5 Funding	0.27	0.61	0.08	-0.07
Title 5 Program	-0.28‡	-0.71**	0.01	-0.08*
Head Start Program	-0.02	-0.36	0.12	-0.12*
Private pay Children	0.02	0.44	0.08	-0.19*
Voucher pay Children	0.40‡	0.01	0.00	0.03
Total site enrollment	0.00	0.00	0.00	0.00*
Toddler and Infant enrolled	-0.49‡	-0.15	0.01	-0.11
Child Characteristics				
Male	-0.28**	-0.03	-0.07‡	0.00
Special needs	-0.52**	-1.27**	-0.22**	-0.12*
Spanish home language	0.50**	0.41	0.04	0.11*
Eng/Spanish home language	0.13	-0.04	-0.06‡	0.00
Other home language	0.27	0.18	0.41**	0.11
Fall score	0.33**	0.43**	0.52**	0.59**
Age at fall assessment	0.83**	2.19**	-	-
Days between assessments	0.00	-0.01	0.00	0.00
preLAS fall score	0.11**	0.18**	0.04**	0.02**
Model R^2	0.42	0.38	0.55	0.52

‡ $p < .10$, * $p < .05$; ** $p < .01$. N = 1511 to 1552 children

Exhibit 3C.14. Associations Between Child Observation Element Scores and Child Outcomes, All Programs

	Child Outcomes, Spring 2015			
	Story and Print Concepts	**Peg Tapping Task**	**Letter Word Identification**	**Applied Problems**
Child Observation Score				
1 or 2 points	1.03**	0.15	**0.17**	**0.07**
4 points	0.14	-0.49	-0.05	-0.03
5 points	0.16	-1.30*	-0.21	-0.08
Site Characteristics				
First 5 Funding	0.28	0.79‡	0.11	-0.06
Title 5 Program	-0.20	-0.57*	0.03	-0.07‡
Head Start Program	0.03	-0.44	0.12	-0.11*
Private pay Children	0.11	-0.09	-0.03	0.00
Voucher pay Children	0.06	0.19	0.05	-0.22*
Center	0.09	0.676	-0.02	0.976**
Total site enrollment	0.00	0.00	0.00	0.00*
Toddler and Infant enrolled	-0.38‡	0.24	0.08	-0.05
Child Characteristics				
Male	-0.29**	-0.04	-0.07*	0.00
Special needs	-0.50**	-1.19**	-0.20**	-0.13*
Spanish home language	0.56**	0.47	0.07	0.13**
Eng/Spanish home language	0.18**	-0.03	-0.06	0.00
Other home language	0.26	0.19	0.41**	0.11
Fall score	0.32**	0.43**	0.52**	0.59**
Age at fall assessment	0.86**	2.24**	-	-
Days between assessments	-0.01	-0.02‡	0.00	0.00
preLAS fall score	0.11**	0.18**	0.04**	0.02**
Model R^2	0.44	0.39	0.55	0.53

‡ $p < .10$, * $p < .05$; ** $p < .01$. N = 1569 to 1611 children

NOTE: Sites with 3 points were the reference category

Exhibit 3C.15. Associations Between Developmental and Health Screenings Element Scores and Child Outcomes, All Programs

	Child Outcomes, Spring 2015			
	Story and Print Concepts	**Peg Tapping Task**	**Letter Word Identification**	**Applied Problems**
Developmental and Health Screenings Score				
1 or 2 points	0.14	0.25	0.14	0.10
4 points	-0.17	-1.19*	0.10	0.00
5 points	0.34	-0.13	0.17	0.05
Site Characteristics				
First 5 Funding	0.27	0.69	0.07	-0.06
Title 5 Program	-0.35*	-0.72**	-0.01	-0.08*
Head Start Program	-0.11	-0.37	0.13‡	-0.10*
Private pay Children	0.35*	-0.18	0.01	0.00
Voucher pay Children	0.16	0.57	0.13	-0.18*
Center	-0.19	0.08	0.01	0.17**
Total site enrollment	0.00	0.00	0.00	0.00*
Toddler and Infant enrolled	-0.50*	0.15	-0.01	-0.06
Child Characteristics				
Male	-0.29**	-0.08	-0.08*	-0.01
Special needs	-0.48**	-1.21**	-0.20**	-0.13*
Spanish home language	0.53**	0.41	0.05	0.13**
Eng/Spanish home language	0.15	-0.09	-0.07*	0.00
Other home language	0.24	0.14	0.39**	0.10
Fall score	0.33**	0.43**	0.52**	0.59**
Age at fall assessment	0.85**	2.25**	-	-
Days between assessments	0.00	-0.02‡	0.00	0.00
preLAS fall score	0.11**	0.18**	0.04**	0.02**
Model R^2	0.44	0.39	0.55	0.53

‡ p < .10, * p < .05; ** p < .01. N = 1569 to 1611 children

NOTE: Sites with 3 points were the reference category

Exhibit 3C.15. Associations Between Minimum Qualifications for Lead Teacher Element Scores and Child Outcomes, All Programs

	Child Outcomes, Spring 2015			
	Story and Print Concepts	**Peg Tapping Task**	**Letter Word Identification**	**Applied Problems**
Minimum Qualifications for Lead Teacher Score				
1 or 2 points	0.01	0.10	-0.14‡	-0.06
4 points	0.26	0.49	-0.06	0.04
5 points	0.44*	1.74**	0.07	0.13‡
Site Characteristics				
First 5 Funding	0.35	1.03	0.14	-0.02
Title 5 Program	-0.28	-0.80	0.01	-0.08
Head Start Program	-0.15	-0.69	0.13	-0.14
Private pay Children	0.28	-0.19	0.03	0.01
Voucher pay Children	0.13	0.41	0.12	-0.18
Center	-0.31	-0.57	-0.07	0.09
Total site enrollment	0.00	0.01	0.00	0.00
Toddler and Infant enrolled	-0.44	0.16	-0.01	-0.05
Child Characteristics				
Male	-0.29	-0.05*	-0.07	0.00
Special needs	-0.48*	-1.22**	-0.21	-0.13*
Spanish home language	0.55	0.53**	0.06‡	0.13**
Eng/Spanish home language	0.16	-0.01	-0.07	0.00
Other home language	0.22	0.20	0.40	0.10*
Fall score	0.33**	0.42**	0.52**	0.59**
Age at fall assessment	0.84**	2.18**	-	-
Days between assessments	0.00	-0.01	0.00	0.00
preLAS fall score	0.11**	0.18**	0.04**	0.02**
Model R^2	0.44	0.39	0.56	0.53

‡ p < .10, * p < .05; ** p < .01. N = 1569 to 1611 children

NOTE: Sites with 3 points were the reference category

Exhibit 3C.16. Associations Between Program Effective Teacher–Child Interaction Element Scores and Child Outcomes, All Programs

	Child Outcomes, Spring 2015			
	Story and Print Concepts	**Peg Tapping Task**	**Letter Word Identification**	**Applied Problems**
Effective Teacher-Child Interactions Score				
1 or 2 points	-0.17	1.23**	-0.12	-0.03
4 points	-0.04	0.09	0.04	-0.04
5 points	0.13	0.58	0.03	-0.01
Site Characteristics				
First 5 Funding	0.25	0.56	0.09	-0.08
Title 5 Program	-0.28*	-0.61*	0.00	-0.09*
Head Start Program	-0.05	-0.37	0.12	-0.10*
Private pay Children	0.28	0.01	-0.01	0.01
Voucher pay Children	0.11	0.34	0.12	-0.20*
Center	-0.24	-0.47	0.01	0.13‡
Total site enrollment	0.00	0.00	0.00‡	0.00*
Toddler and Infant enrolled	-0.48‡	-0.14	-0.01	-0.08
Child Characteristics				
Male	-0.28**	-0.06	-0.08*	-0.01
Special needs	-0.49**	-1.24**	-0.20**	-0.13*
Spanish home language	0.53**	0.44	0.05	0.13**
Eng/Spanish home language	0.16	-0.07	-0.07*	0.00
Other home language	0.24	0.21	0.40**	0.10
Fall score	0.33*8	0.43**	0.53**	0.59**
Age at fall assessment	0.85**	2.23**	-	-
Days between assessments	0.00	-0.02‡	0.00	0.00
preLAS fall score	0.11**	0.18**	0.04**	0.02**
Model R^2	0.44	0.39	0.55	0.53

‡ p < .10, * p < .05; ** p < .01. N = 1569 to 1611 children

NOTE: Sites with 3 points were the reference category

Exhibit C.17. Associations Between Environment Rating Scales Element Scores and Child Outcomes, All Programs

	Child Outcomes, Spring 2015			
	Story and Print Concepts	Peg Tapping Task	Letter Word Identification	Applied Problems
ERS Ratings				
1 or 2 points	0.06	0.60	-0.04	0.07
4 points	0.29‡	0.46	-0.02	-0.02
5 points	-0.19	-0.52	0.03	0.00
Site Characteristics				
First 5 Funding	0.32	0.93‡	0.05	-0.05
Title 5 Program	-0.29*	-0.70**	0.01	-0.07‡
Head Start Program	-0.07	-0.28	0.12	-0.09*
Private pay Children	0.26	-0.10	0.02	0.03
Voucher pay Children	0.07	0.36	0.11	-0.21**
Center	-0.26	-0.50	0.01	0.12
Total site enrollment	0.00	0.00	0.00	0.00
Toddler and Infant enrolled	-0.41‡	-0.04	-0.02	-0.10
Child Characteristics				
Male	-0.29**	-0.06	-0.08*	0.00
Special needs	-0.49**	-1.24**	-0.20**	-0.13*
Spanish home language	0.51**	0.37	0.05	0.13**
Eng/Spanish home language	0.13	-0.14	-0.07‡	0.00
Other home language	0.21	0.10	0.40**	0.11
Fall score	0.33**	0.43**	0.53**	0.59**
Age at fall assessment	0.84**	2.21**	-	-
Days between assessments	0.00	-0.01	0.00	0.00
preLAS fall score	0.11**	0.17**	0.04**	0.02**
Model R^2	0.44	0.39	0.55	0.53

‡ p < .10, * p < .05; ** p < .01. N = 1569 to 1611 children

NOTE: Sites with 3 points were the reference category

Exhibit 3C.18. Associations Between Program QRIS Total Score (Sum of Element Scores) and Child Outcomes, All Programs

	Child Outcomes, Spring 2015			
	Story and Print Concepts	**Peg Tapping Task**	**Letter Word Identification**	**Applied Problems**
QRIS Total Score				
QRIS total Score	0.00	-0.01	0.00	0.00
Site Characteristics				
First 5 Funding	0.25	0.59	0.07	-0.07
Title 5 Program	-0.27‡	-0.68**	0.00	-0.09*
Head Start Program	-0.05	-0.35	0.12	-0.11*
Private pay Children	0.08	0.44	0.11	-0.19*
Voucher pay Children	0.34‡	-0.02	0.02	0.02
Center	-0.24	-0.26	-0.05	0.10
Total site enrollment	0.00	0.00	0.00	0.00*
Toddler and Infant enrolled	-0.51‡	-0.15	-0.02	-0.08
Child Characteristics				
Male	-0.29**	-0.06	-0.08*	-0.01
Special needs	-0.48**	-1.20**	-0.20**	-0.13*
Spanish home language	0.53**	0.43	0.05	0.12**
Eng/Spanish home language	0.15	-0.09	-0.07‡	0.00
Other home language	0.23	0.16	0.40**	0.10
Fall score	0.33**	0.43**	0.53**	0.59**
Age at fall assessment	0.84**	2.22**	-	-
Days between assessments	0.00	-0.01	0.00	0.00
preLAS fall score	0.33**	0.43**	0.53**	0.59**
Model R^2	0.44	0.39	0.55	0.53

‡ p < .10, * p < .05; ** p < .01. N = 1569 to 1611 children

NOTE: Sites with 3 points were the reference category

Appendix 3D. Alternative Rating Approach Analysis Results

Descriptive Statistics of Alternative Ratings Among Programs With Full California QRIS Ratings as of January 2014

Exhibit 3D.1. Distribution of California QRIS Ratings and Alternative Ratings Among Fully Rated Programs in January 2014, All Programs and by Program Type

California QRIS Rating Tier or Element Score	All Programs		Centers		FCCHs	
	Number	Percentage	Number	Percentage	Number	Percentage
California QRIS Rating Tier						
Tier 1	0	0.0%	0	0.0%	0	0.0%
Tier 2	77	16.3%	20	5.5%	57	53.3%
Tier 3	158	33.5%	124	34.0%	34	31.8%
Tier 4	200	42.4%	189	51.8%	11	10.3%
Tier 5	37	7.8%	32	8.8%	5	4.7%
Total	472	100.0%	365	100.0%	107	100.0%
Two-Level Block Rating Tier						
Tier 1	148	31.4%	81	22.2%	67	62.6%
Tier 2	13	2.8%	7	1.9%	6	5.6%
Tier 3	94	19.9%	73	20.0%	21	19.6%
Tier 4	180	38.1%	172	47.1%	8	7.5%
Tier 5	37	7.8%	32	8.8%	5	4.7%
Total	472	100.0%	365	100.0%	107	100.0%
Five-Level Block Rating Tier						
Tier 1	148	31.4%	81	22.2%	67	62.6%
Tier 2	155	32.8%	126	34.5%	29	27.1%
Tier 3	132	28.0%	125	34.2%	7	6.5%
Tier 4	37	7.8%	33	9.0%	4	3.7%
Tier 5	0	0.0%	0	0.0%	0	0.0%
Total	472	100.0%	365	100.0%	107	100.0%
Element Average Rating Tier						
Tier 1	1	0.2%	0	0.0%	1	0.9%
Tier 2	58	12.3%	12	3.3%	46	43.0%
Tier 3	151	32.0%	107	29.3%	44	41.1%
Tier 4	229	48.5%	214	58.6%	15	14.0%
Tier 5	33	7.0%	32	8.8%	1	0.9%
Total	472	100.0%	365	100.0%	107	100.0%

Exhibit 3D.2. Comparison of California QRIS and Consortia QRIS Ratings, Centers

California QRIS Rating	Consortia QRIS Rating					
	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	Total
Tier 1	0	0	0	0	0	0
Tier 2	0	19	1	0	0	20
Tier 3	2	0	121	1	0	124
Tier 4	1	0	9	179	0	189
Tier 5	0	0	0	4	28	32
Total	3	19	131	184	28	365

Exhibit 3D.3. Comparison of California QRIS and Consortia QRIS Ratings, FCCHs

California QRIS Rating	Consortia QRIS Rating					
	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	Total
Tier 1	0	0	0	0	0	0
Tier 2	1	56	0	0	0	57
Tier 3	0	10	23	1	0	34
Tier 4	0	0	1	10	0	11
Tier 5	0	0	0	1	4	5
Total	1	66	24	12	4	107

Exhibit 3D.4. Comparison of California QRIS and Two-Level Block Ratings, Centers

California QRIS Rating	Two-Level Block Rating					
	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	Total
Tier 1	0	0	0	0	0	0
Tier 2	13	7	0	0	0	20
Tier 3	51	0	73	0	0	124
Tier 4	17	0	0	172	0	189
Tier 5	0	0	0	0	32	32
Total	81	7	73	172	32	365

Exhibit 3D.5. Comparison of California QRIS and Two-Level Block Ratings, FCCHs

California QRIS Rating	Two-Level Block Rating					
	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	Total
Tier 1	0	0	0	0	0	0
Tier 2	51	6	0	0	0	57
Tier 3	13	0	21	0	0	34
Tier 4	3	0	0	8	0	11
Tier 5	0	0	0	0	5	5
Total	67	6	21	8	5	107

Exhibit 3D.6. Comparison of California QRIS and Five-Level Block Ratings, Centers

California QRIS Rating	Five-Level Block Rating					
	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	Total
Tier 1	0	0	0	0	0	0
Tier 2	13	7	0	0	0	20
Tier 3	51	64	9	0	0	124
Tier 4	17	55	106	11	0	189
Tier 5	0	0	10	22	0	32
Total	81	126	125	33	0	365

Exhibit 3D.7. Comparison of California QRIS and Five-Level Block Ratings, FCCHs

California QRIS Rating	Five-Level Block Rating					
	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	Total
Tier 1	0	0	0	0	0	0
Tier 2	51	6	0	0	0	57
Tier 3	13	21	0	0	0	34
Tier 4	3	2	6	0	0	11
Tier 5	0	0	1	4	0	5
Total	67	29	7	4	0	107

Exhibit 3D.8. Comparison of California QRIS and Element Average Ratings, Centers

California QRIS Rating	Element Average Rating					
	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	Total
Tier 1	0	0	0	0	0	0
Tier 2	0	12	8	0	0	20
Tier 3	0	0	99	25	0	124
Tier 4	0	0	0	189	0	189
Tier 5	0	0	0	0	32	32
Total	0	12	107	214	32	365

Exhibit 3D.9. Comparison of California QRIS and Element Average Ratings, FCCHs

California QRIS Rating	Element Average Rating					
	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	Total
Tier 1	0	0	0	0	0	0
Tier 2	1	46	10	0	0	57
Tier 3	0	0	34	0	0	34
Tier 4	0	0	0	11	0	11
Tier 5	0	0	0	4	1	5
Total	1	46	44	15	1	107

Analysis of Variance Results Examining Relationships Between Alternative Ratings and Independent Observations of Quality, Centers

Exhibit 3D.10. CLASS Total and Preschool Domain Scores by Consortia QRIS Rating Level and ANOVA Results, Centers

Consortia QRIS Rating Level	Preschool and Toddler		Preschool Domain Scores			
	CLASS Total Score	*N*	Emotional Support	Classroom Organization	Instructional Support	*N*
Tier 1	—	2	—	—	—	2
Tier 2	—	3	—	—	—	2
Tier 3	4.85 (0.51)	55	5.83 (0.49)	5.39 (0.64)	2.95 (0.87)[e]	54
Tier 4	4.94 (0.68)	69	5.97 (0.69)	5.58 (0.75)	3.00 (0.85)[e]	67
Tier 5	5.38 (0.38)	10	6.17 (0.49)	5.78 (0.52)	3.85 (0.62)[c, d]	10
All tiers	4.92 (0.61)	139	5.92 (0.60)	5.51 (0.69)	3.03 (0.87)	135
ANOVA results	F[4,134] = 2.26		F[4,130] = 1.03	F[4,130] = 1.47	F[4,130] = 2.92*	

Cells show the mean and standard deviation for the CLASS scores at each rating level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Note that average CLASS score data are not presented for rating levels with fewer than five observations.

Exhibit 3D.11. PQA Form A Total and Preschool Domain Scores by Consortia QRIS Rating Level and ANOVA Results, Centers

Consortia QRIS Rating Level	All Ages		Preschool Domain Scores				
	PQA Form A Total Score	*N*	Learning Environment	Daily Routine	Adult-Child Interaction	Curriculum Planning and Assessment	*N*
Tier 1	—	2	—	—	—	—	—
Tier 2	—	2	—	—	—	—	—
Tier 3	3.43 (0.49)	53	3.55 (0.53)	3.29 (0.60)	3.19 (0.62)[d, e]	4.09 (0.62)	52
Tier 4	3.54 (0.51)	73	3.68 (0.49)	3.27 (0.59)	3.57 (0.74)[c]	4.13 (0.56)	69
Tier 5	3.85 (0.61)	10	3.93 (0.46)	3.47 (0.69)	3.86 (0.75)[c]	4.10 (0.85)	10
All tiers	3.52 (0.52)	140	3.64 (0.51)	3.29 (0.60)	3.44 (0.72)	4.11 (0.60)	134
ANOVA results	F[4,135] = 1.62		F[4,129] = 1.61	F[4,129] = 0.51	F[4,129] = 3.51**	F[4,129] = 0.09	

Cells show the mean and standard deviation for the PQA scores at each rating level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Note that average PQA score data are not presented for rating levels with fewer than five observations.

Exhibit 3C.15. PQA Form B Total and Domain Scores by Consortia QRIS Rating Level and ANOVA Results, Centers

Consortia QRIS Rating Level	All Ages				
	PQA Form B Total Score	Parent Involvement and Family Services	Staff Qualifications and Staff Development	Program Management	*N*
Tier 1	—	—	—	—	2
Tier 2	—	—	—	—	2
Tier 3	3.84 (0.39)	4.07 (0.52)	3.53 (0.44)	3.83 (0.44)	49
Tier 4	3.78 (0.50)	3.97 (0.64)	3.48 (0.60)	3.80 (0.56)	63
Tier 5	4.11 (0.47)	4.22 (0.55)	3.93 (0.56)	4.13 (0.44)	8
All tiers	3.83 (0.46)	4.04 (0.58)	3.54 (0.56)	3.83 (0.51)	124
ANOVA results	F[4,119] = 1.03	F[4,119] = 0.75	F[4,119] = 1.22	F[4,119] = 1.20	

Cells show the mean and standard deviation for the PQA scores at each rating level. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Note that average PQA score data are not presented for rating levels with fewer than five observations.

Exhibit 3D.12. CLASS Total and Preschool Domain Scores by Two-Level Block Rating Level and ANOVA Results, Centers

Two-Level Block Rating Level	Preschool and Toddler		Preschool Domain Scores			
	CLASS Total Score	*N*	Emotional Support	Classroom Organization	Instructional Support	*N*
Tier 1	4.91 (0.44)	22	5.88 (0.39)	5.33 (0.74)	3.07 (0.76)	20
Tier 2	—	1	—	—	—	1
Tier 3	4.77 (0.51)[e]	38	5.77 (0.48)	5.37 (0.59)	2.86 (0.89)[e]	38
Tier 4	4.93 (0.70)	66	5.97 (0.70)	5.57 (0.74)	3.00 (0.87)[e]	64
Tier 5	5.39 (0.34)[c]	12	6.23 (0.50)	5.88 (0.54)	3.74 (0.70)[c, d]	12
All tiers	4.92 (0.61)	139	5.92 (0.60)	5.51 (0.69)	3.03 (0.87)	135
ANOVA results	F[4,134] = 3.12*		F[4,130] = 1.60	F[4,130] = 1.76	F[4,130] = 2.75*	

Cells show the mean and standard deviation for the CLASS scores at each rating level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Note that average CLASS score data are not presented for rating levels with fewer than five observations.

Exhibit 3D.13. PQA Form A Total and Preschool Domain Scores by Two-Level Block Rating Level and ANOVA Results, Centers

Two-Level Block Rating Level	All Ages		Preschool Domain Scores				
	PQA Form A Total Score	*N*	Learning Environment	Daily Routine	Adult-Child Interaction	Curriculum Planning and Assessment	*N*
Tier 1	3.42 (0.53)	21	3.63 (0.5)	3.20 (0.71)	3.11 (0.68)[e]	4.00 (0.78)	19
Tier 2	—	1	—	—	—	—	1
Tier 3	3.42 (0.47)	36	3.52 (0.53)	3.29 (0.55)	3.20 (0.57)[e]	4.12 (0.56)	36
Tier 4	3.55 (0.51)	70	3.66 (0.50)	3.29 (0.60)	3.58 (0.75)	4.17 (0.51)	66
Tier 5	3.81 (0.59)	12	3.95 (0.43)	3.43 (0.65)	3.85 (0.71)[a, c]	3.93 (0.91)	12
All tiers	3.52 (0.52)	140	3.64 (0.51)	3.29 (0.60)	3.44 (0.72)	4.11 (0.60)	134
ANOVA results	F[4,135] = 1.61		F[4,129] = 1.73	F[4,129] = 0.48	F[4,129] = 4.06**	F[4,129] = 0.64	

Cells show the mean and standard deviation for the PQA scores at each rating level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Note that average PQA score data are not presented for rating levels with fewer than five observations.

Exhibit 3D.14. PQA Form B Total and Domain Scores by Two-Level Block Rating Level and ANOVA Results, Centers

Two-Level Block Rating Level	All Ages				
	PQA Form B Total Score	Parent Involvement and Family Services	Staff Qualifications and Staff Development	Program Management	*N*
Tier 1	3.80 (0.40)	3.96 (0.58)	3.58 (0.51)	3.78 (0.43)	20
Tier 2	—	—	—	—	1
Tier 3	3.86 (0.38)	4.14 (0.47)	3.49 (0.44)	3.84 (0.45)	32
Tier 4	3.81 (0.49)	4.00 (0.61)	3.51 (0.62)	3.82 (0.55)	61
Tier 5	3.98 (0.64)	4.11 (0.80)	3.80 (0.58)	4.00 (0.64)	10
All tiers	3.83 (0.46)	4.04 (0.58)	3.54 (0.56)	3.83 (0.51)	124
ANOVA results	F[4,119] = 0.45	F[4,119] = 0.42	F[4,119] = 0.82	F[4,119] = 0.61	

Cells show the mean and standard deviation for the PQA scores at each rating level. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Note that average PQA score data are not presented for rating levels with fewer than five observations.

Exhibit 3D.15. CLASS Total and Preschool Domain Scores by Three-Level Block Rating Level and ANOVA Results, Centers

Three-Level Block Rating Level	Preschool and Toddler		Preschool Domain Scores			
	CLASS Total Score	*N*	Emotional Support	Classroom Organization	Instructional Support	*N*
Tier 1	4.91 (0.44)	22	5.88 (0.39)	5.33 (0.74)	3.07 (0.76)	20
Tier 2	4.87 (0.60)	64	5.87 (0.61)	5.52 (0.69)	2.91 (0.88)[e]	64
Tier 3	—	1	—	—	—	1
Tier 4	4.87 (0.72)	40	5.93 (0.68)	5.47 (0.70)	3.00 (0.89)	38
Tier 5	5.39 (0.34)	12	6.23 (0.50)	5.88 (0.54)	3.74 (0.70)[b]	12
All tiers	4.92 (0.61)	139	5.92 (0.60)	5.51 (0.69)	3.03 (0.87)	135
ANOVA results	F[4,134] = 2.13		F[4,130] = 0.95	F[4,130] = 1.32	F[4,130] = 2.52*	

Cells show the mean and standard deviation for the CLASS scores at each rating level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Note that average CLASS score data are not presented for rating levels with fewer than five observations.

Exhibit 3D.15. PQA Form A Total and Preschool Domain Scores by Three-Level Block Rating Level and ANOVA Results, Centers

Three-Level Block Rating Level	All Ages		Preschool Domain Scores				
	PQA Form A Total Score	*N*	Learning Environment	Daily Routine	Adult-Child Interaction	Curriculum Planning and Assessment	*N*
Tier 1	3.42 (0.53)	21	3.63 (0.50)	3.20 (0.71)	3.11 (0.68)[d, e]	4.00 (0.78)	19
Tier 2	3.44 (0.50)	63	3.56 (0.48)	3.25 (0.60)	3.27 (0.69)[d]	4.19 (0.55)	62
Tier 3	—	1	—	—	—	—	1
Tier 4	3.59 (0.49)	43	3.68 (0.55)	3.34 (0.56)	3.74 (0.66)[a, b]	4.09 (0.48)	40
Tier 5	3.81 (0.59)	12	3.95 (0.43)	3.43 (0.65)	3.85 (0.71)[a]	3.93 (0.91)	12
All tiers	3.52 (0.52)	140	3.64 (0.51)	3.29 (0.60)	3.44 (0.72)	4.11 (0.60)	134
ANOVA results	F[4,135] = 1.80		F[4,129] = 1.77	F[4,129] = 0.41	F[4,129] = 5.11***	F[4,129] = 0.89	

Cells show the mean and standard deviation for the PQA scores at each rating level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Note that average PQA score data are not presented for rating levels with fewer than five observations.

Exhibit 3D.16. PQA Form B Total and Domain Scores by Three-Level Block Rating Level and ANOVA Results, Centers

Three-Level Block Rating Level	All Ages				
	PQA Form B Total Score	Parent Involvement and Family Services	Staff Qualifications and Staff Development	Program Management	*N*
Tier 1	3.80 (0.40)	3.96 (0.58)	3.58 (0.51)	3.78 (0.43)	20
Tier 2	3.77 (0.47)	3.99 (0.58)	3.37 (0.53)	3.84 (0.50)	56
Tier 3	—	—	—	—	2
Tier 4	3.88 (0.42)	4.11 (0.52)	3.67 (0.55)	3.78 (0.54)	36
Tier 5	3.98 (0.64)	4.11 (0.80)	3.80 (0.58)	4.00 (0.64)	10
All tiers	3.83 (0.46)	4.04 (0.58)	3.54 (0.56)	3.83 (0.51)	124
ANOVA results	F[4,119] = 1.36	F[4,119] = 0.89	F[4,119] = 2.85*	F[4,119] = 0.82	

Cells show the mean and standard deviation for the PQA scores at each rating level. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Note that average PQA score data are not presented for rating levels with fewer than five observations.

Exhibit 3D.17. CLASS Total and Preschool Domain Scores by Five-Level Block Rating Level and ANOVA Results, Centers

Five-Level Block Rating Level	Preschool and Toddler		Preschool Domain Scores			
	CLASS Total Score	*N*	Emotional Support	Classroom Organization	Instructional Support	*N*
Tier 1	4.91 (0.44)	22	5.88 (0.39)	5.33 (0.74)	3.07 (0.76)	20
Tier 2	4.87 (0.60)	64	5.87 (0.61)	5.52 (0.68)	2.91 (0.88)	64
Tier 3	4.90 (0.70)	43	5.95 (0.68)	5.48 (0.68)	3.04 (0.85)	41
Tier 4	5.36 (0.42)	10	6.22 (0.43)	5.88 (0.58)	3.69 (0.91)	10
Tier 5	—	0	—	—	—	0
All tiers	4.92 (0.61)	139	5.92 (0.60)	5.51 (0.69)	3.03 (0.87)	135
ANOVA results	F[3,135] = 1.95		F[3,131] = 1.06	F[3,131] = 1.44	F[3,131] = 2.45	

Cells show the mean and standard deviation for the CLASS scores at each rating level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Exhibit 3D.18. PQA Form A Total and Preschool Domain Scores by Five-Level Block Rating Level and ANOVA Results, Centers

Five-Level Block Rating Level	All Ages		Preschool Domain Scores				
	PQA Form A Total Score	*N*	Learning Environ-ment	Daily Routine	Adult-Child Interaction	Curriculum Planning and Assessment	*N*
Tier 1	3.42 (0.53)[d]	21	3.63 (0.50)	3.20 (0.71)	3.11 (0.68)[c, d]	4.00 (0.78)	19
Tier 2	3.44 (0.50)[d]	63	3.56 (0.48)[d]	3.25 (0.60)	3.27 (0.69)[d]	4.19 (0.55)	62
Tier 3	3.56 (0.52)	45	3.68 (0.54)	3.29 (0.58)	3.69 (0.68)[a]	4.02 (0.58)	43
Tier 4	3.95 (0.33)[a, b]	11	4.04 (0.37)[b]	3.63 (0.47)	4.06 (0.45)[a, b]	4.26 (0.67)	10
Tier 5	—	0	—	—	—	—	0
All tiers	3.52 (0.52)	140	3.64 (0.51)	3.29 (0.60)	3.44 (0.72)	4.11 (0.60)	134
ANOVA results	F[3,136] = 3.61*		F[3,130] = 2.85*	F[3,130] = 1.28	F[3,130] = 7.69***	F[3,130] = 1.17	

Cells show the mean and standard deviation for the PQA scores at each rating level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Exhibit 3D.19. PQA Form B Total and Domain Scores by Five-Level Block Rating Level and ANOVA Results, Centers

Five-Level Block Rating level	All Ages				
	PQA Form B Total Score	Parent Involvement and Family Services	Staff Qualifications and Staff Development	Program Management	*N*
Tier 1	3.80 (0.40)	3.96 (0.58)	3.58 (0.51)	3.78 (0.43)	20
Tier 2	3.77 (0.47)	3.99 (0.58)	3.37 (0.53)[d]	3.84 (0.50)	56
Tier 3	3.88 (0.46)	4.09 (0.57)	3.65 (0.57)	3.79 (0.57)	38
Tier 4	4.11 (0.48)	4.29 (0.64)	3.91 (0.46)[b]	4.04 (0.48)	10
Tier 5	—	—	—	—	0
All tiers	3.83 (0.46)	4.04 (0.58)	3.54 (0.56)	3.83 (0.51)	124
ANOVA results	F[3,120] = 1.77	F[3,120] = 0.94	F[3,120] = 4.11**	F[3,120] = 0.72	

Cells show the mean and standard deviation for the PQA scores at each rating level. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Exhibit 3D.20. CLASS Total and Preschool Domain Scores by Element Average Rating Level and ANOVA Results, Centers

Element Average Rating level	Preschool and Toddler		Preschool Domain Scores			
	CLASS Total Score	*N*	Emotional Support	Classroom Organization	Instructional Support	*N*
Tier 1	—	0	—	—	—	0
Tier 2	—	1	—	—	—	0
Tier 3	4.76 (0.48)[e]	46	5.77 (0.41)[e]	5.32 (0.59)[e]	2.84 (0.83)[e]	46
Tier 4	4.94 (0.67)	80	5.96 (0.68)	5.56 (0.74)	3.03 (0.86)[e]	77
Tier 5	5.39 (0.34)[c]	12	6.23 (0.50)[c]	5.88 (0.54)[c]	3.74 (0.70)[c, d]	12
All tiers	4.92 (0.61)	139	5.92 (0.60)	5.51 (0.69)	3.03 (0.87)	135
ANOVA results	F[3,135] = 3.81*		F[2,132] = 3.32*	F[2,132] = 3.88*	F[2,132] = 5.38**	

Cells show the mean and standard deviation for the CLASS scores at each rating level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Note that average CLASS score data are not presented for rating levels with fewer than five observations.

Exhibit 3D.21. PQA Form A Total and Preschool Domain Scores by Element Average Rating Level and ANOVA Results, Centers

Element Average Rating level	All Ages		Preschool Domain Scores				
	PQA Form A Total Score	*N*	Learning Environment	Daily Routine	Adult-Child Interaction	Curriculum Planning and Assessment	*N*
Tier 1	—	0	—	—	—	—	0
Tier 2	—	1	—	—	—	—	0
Tier 3	3.39 (0.50)	41	3.52 (0.54)[e]	3.24 (0.59)	3.14 (0.60)[d, e]	4.12 (0.58)	41
Tier 4	3.53 (0.50)	86	3.66 (0.49)	3.29 (0.60)	3.53 (0.74)[c]	4.14 (0.56)	81
Tier 5	3.81 (0.59)	12	3.95 (0.43)[c]	3.43 (0.65)	3.85 (0.71)[c]	3.93 (0.91)	12
All tiers	3.52 (0.52)	140	3.64 (0.51)	3.29 (0.60)	3.44 (0.72)	4.11 (0.60)	134
ANOVA results	F[3,136] = 2.28		F[2,131] = 3.59*	F[2,131] = 0.46	F[2,131] = 6.77**	F[2,131] = 0.61	

Cells show the mean and standard deviation for the PQA scores at each rating level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Note that average PQA score data are not presented for rating levels with fewer than five observations.

Exhibit 3D.22. PQA Form B Total and Domain Scores by Element Average Rating Level and ANOVA Results, Centers

Element Average Rating level	All Ages				
	PQA Form B Total Score	Parent Involvement and Family Services	Staff Qualifications and Staff Development	Program Management	*N*
Tier 1	—	—	—	—	0
Tier 2	—	—	—	—	1
Tier 3	3.77 (0.34)	4.05 (0.46)	3.41 (0.43)	3.73 (0.42)	39
Tier 4	3.84 (0.49)	4.02 (0.61)	3.56 (0.60)	3.86 (0.53)	74
Tier 5	3.98 (0.64)	4.11 (0.80)	3.80 (0.58)	4.00 (0.64)	10
All tiers	3.83 (0.46)	4.04 (0.58)	3.54 (0.56)	3.83 (0.51)	124
ANOVA results	F[3,120] = 0.68	F[3,120] = 0.33	F[3,120] = 1.76	F[3,120] = 1.16	

Cells show the mean and standard deviation for the PQA scores at each rating level. For ANOVA *F* test results (indicating significant differences across rating level): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating level, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Note that average PQA score data are not presented for rating levels with fewer than five observations.

Exhibit 3D.23. CLASS Total and Preschool Domain Scores by ERS Hybrid Rating Level and ANOVA Results, Centers

ERS Hybrid Rating level	Preschool and Toddler		Preschool Domain Scores			
	CLASS Total Score	*N*	Emotional Support	Classroom Organization	Instructional Support	*N*
Tier 1	—	0	—	—	—	0
Tier 2	—	2	—	—	—	1
Tier 3	4.80 (0.50)[e]	53	5.82 (0.45)	5.39 (0.64)	2.87 (0.82)[e]	53
Tier 4	4.92 (0.69)	72	5.95 (0.70)	5.54 (0.73)	3.02 (0.89)[e]	69
Tier 5	5.39 (0.34)[c]	12	6.23 (0.50)	5.88 (0.54)	3.74 (0.70)[c, d]	12
All tiers	4.92 (0.61)	139	5.92 (0.60)	5.51 (0.69)	3.03 (0.87)	135
ANOVA results	F[3,135] = 3.24*		F[3,131] = 1.68	F[3,131] = 1.78	F[3,131] = 3.47*	

Cells show the mean and standard deviation for the CLASS scores at each rating level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across rating level): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tiert3; [d] differs from Tier 4; [e] differs from Tier 5.

Note that average CLASS score data are not presented for rating levels with fewer than five observations.

Exhibit 3D.24. PQA Form A Total and Preschool Domain Scores by ERS Hybrid Rating Level and ANOVA Results, Centers

ERS Hybrid Rating level	All Ages		Preschool Domain Scores				
	PQA Form A Total Score	*N*	Learning Environment	Daily Routine	Adult-Child Interaction	Curriculum Planning and Assessment	*N*
Tier 1	—	0	—	—	—	—	0
Tier 2	—	1	—	—	—	—	0
Tier 3	3.45 (0.50)	48	3.56 (0.52)	3.30 (0.61)	3.22 (0.61)[e]	4.15 (0.57)	48
Tier 4	3.51 (0.51)	79	3.64 (0.50)	3.26 (0.60)	3.52 (0.76)	4.12 (0.57)	74
Tier 5	3.81 (0.59)	12	3.95 (0.43)	3.43 (0.65)	3.85 (0.71)[c]	3.93 (0.91)	12
All tiers	3.52 (0.52)	140	3.64 (0.51)	3.29 (0.60)	3.44 (0.72)	4.11 (0.60)	134
ANOVA results	F[3,136] = 1.65		F[2,131] = 2.9	F[2,131] = 0.43	F[2,131] = 4.84**	F[2,131] = 0.64	

Cells show the mean and standard deviation for the PQA scores at each rating level. The preschool domain scores have a smaller *N* because some participating centers did not have any preschool classrooms. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Note that average PQA score data are not presented for rating levels with fewer than five observations.

Exhibit 3D.25. PQA Form B Total and Domain Scores by ERS Hybrid Rating Level and ANOVA Results, Centers

ERS Hybrid Rating level	All Ages				
	PQA Form B Total Score	Parent Involvement and Family Services	Staff Qualifications and Staff Development	Program Management	*N*
Tier 1	—	—	—	—	0
Tier 2	—	4.56 (—)	4.00 (—)	3.43 (—)	1
Tier 3	3.80 (0.36)	4.07 (0.45)	3.45 (0.47)	3.78 (0.44)	44
Tier 4	3.83 (0.49)	4.00 (0.63)	3.55 (0.6)	3.85 (0.54)	69
Tier 5	3.98 (0.64)	4.11 (0.8)	3.80 (0.58)	4.00 (0.64)	10
All tiers	3.83 (0.46)	4.04 (0.58)	3.54 (0.56)	3.83 (0.51)	124
ANOVA results	F[3,120] = 0.48	F[3,120] = 0.44	F[3,120] = 1.38	F[3,120] = 0.75	

Cells show the mean and standard deviation for the PQA scores at each rating level. For ANOVA *F* test results (indicating significant differences across rating levels): * $p < .05$; ** $p < .01$; *** $p < .001$. When ANOVA is significant, significant ($p < .05$) differences between individual rating levels, after Tukey-Kramer adjustment for multiple comparisons, are indicated as follows:

[a] differs from Tier 1; [b] differs from Tier 2; [c] differs from Tier 3; [d] differs from Tier 4; [e] differs from Tier 5.

Note that average PQA score data are not presented for rating levels with fewer than five observations.

Multilevel Regression Model Results Examining Relationships Between Alternative Ratings and Child Outcomes

Exhibit 3D.26. Associations Between Two-Level Block Ratings and Child Outcomes, All Programs

	Child Outcomes, Spring 2015			
	Story and Print Concepts	**Peg Tapping Task**	**Letter Word Identification**	**Applied Problems**
QRIS Alternative Rating Block 2 Ratings				
Tier 1 or 2	0.12	0.63**	0.07	0.00
Tier 4	0.25	0.16	0.16**	0.04
Tier 5	0.50**	1.35**	0.22**	0.12
Site Characteristics				
First 5 Funding	0.25	0.64	0.07	-0.07
Title 5 Program	-0.29**	-0.68**	0.00	-0.10**
Head Start Program	-0.12	-0.46	0.09	-0.12**
Private pay Children	0.04	0.52	0.07	-0.20**
Voucher pay Children	0.36**	-0.19	0.04	0.02
Center	-0.37	-0.08	-0.06	0.11
Total site enrollment	0.00	0.00	0.00	0.00
Toddler and Infant enrolled	-0.57**	-0.28	-0.03	-0.11
Child Characteristics				
Male	-0.27**	-0.03	-0.07**	-0.01
Special needs	-0.51**	-1.26**	-0.21**	-0.14**
Spanish home language	0.54**	0.53‡	0.06	0.13**
Eng/Spanish home language	0.14	-0.08	-0.07‡	0.00
Other home language	0.23	0.23	0.40**	0.11
Fall score	0.33**	0.43**	0.52**	0.59**
Age at fall assessment	0.82**	2.21**	-	-
Days between assessments	0.00	-0.01	0.00	0.00
preLAS fall score	0.11**	0.17**	0.04**	0.02**
Model R^2	0.44	0.39	0.56	0.53

‡ p < .10, * p < .05; ** p < .01. N = 1569 to 1611 children

NOTE: Sites with a rating of 3 were the reference category

Exhibit 3D.27. Associations Between Two-Level Block Ratings and Child Outcomes, Centers Only

	Child Outcomes, Spring 2015			
	Story and Print Concepts	Peg Tapping Task	Letter Word Identification	Applied Problems
	Baseline	Baseline	Baseline	Baseline
QRIS Alternative Rating Block 2 Ratings				
Tier 1 or 2	0.02	0.62‡	0.09	0.01
Tier 4	0.19	0.15	0.17*	0.05
Tier 5	0.43	1.28*	0.24*	0.12
Site Characteristics				
First 5 Funding	0.29	0.65	0.08	-0.06
Title 5 Program	-0.29*	-0.72**	0.01	-0.09*
Head Start Program	-0.09	-0.44	0.09	-0.12**
Private pay Children	-0.01	0.52	0.05	-0.19*
Voucher pay Children	0.45*	-0.19	0.03	0.03
Total site enrollment	0.00	0.00	0.00	0.00‡
Toddler and Infant enrolled	-0.57*	-0.30	-0.01	-0.13
Child Characteristics				
Male	-0.26**	0.01	-0.06	0.00
Special needs	-0.55**	-1.33**	-0.22**	-0.14*
Spanish home language	0.50**	0.51	0.05	0.12*
Eng/Spanish home language	0.11	-0.04	-0.06	0.00
Other home language	0.27	0.25	0.41**	0.11
Fall score	0.33**	0.43**	0.52**	0.59**
Age at fall assessment	0.81**	2.18**	-	-
Days between assessments	0.00	-0.01	0.00	0.00
preLAS fall score	0.11**	0.18**	0.04**	0.02**
Model R^2	0.43	0.38	0.56	0.52

‡ $p < .10$, * $p < .05$; ** $p < .01$. N = 1511 to 1552 children

NOTE: Sites with a rating of 3 were the reference category

Exhibit 3D.28. Associations Between Five-Level Block Ratings and Child Outcomes, All Programs

	Child Outcomes, Spring 2015			
	Story and Print Concepts	Peg Tapping Task	Letter Word Identification	Applied Problems
	Baseline	Baseline	Baseline	Baseline
QRIS Alternative Rating Block 5 Ratings				
Tier 1 or 2	-0.10	0.43‡	-0.05	0.03
Tier 4	0.21	1.27**	0.06	0.07
Site Characteristics				
First 5 Funding	0.25	0.60	0.08	-0.07
Title 5 Program	-0.26‡	-0.67**	0.01	-0.09*
Head Start Program	-0.14	-0.51‡	0.09	-0.11*
Private pay Children	0.07	0.48	0.09	-0.18*
Voucher pay Children	0.32‡	-0.15	0.01	0.00
Center	-0.34	-0.38	-0.03	0.14*
Total site enrollment	0.00	0.00	0.00	0.00*
Toddler and Infant enrolled	-0.56*	-0.24	-0.02	-0.10
Child Characteristics				
Male	-0.28**	-0.06	-0.08*	-0.01
Special needs	-0.51**	-1.24**	-0.21**	-0.14**
Spanish home language	0.54**	0.45	0.06	0.12*
Eng/Spanish home language	0.13	-0.11	-0.07‡	0.00
Other home language	0.24	0.23	0.41**	0.11
Fall score	0.33**	0.43**	0.53**	0.59**
Age at fall assessment	0.82**	2.21**	-	-
Days between assessments	0.00	-0.01	0.00	0.00
preLAS fall score	0.11**	0.18**	0.04**	0.02**
Model R^2	0.44	0.39	0.56	0.53

‡ p < .10, * p < .05; ** p < .01. N = 1569 to 1611 children

NOTE: Sites with a rating of 3 were the reference category

Exhibit 3D.29. Associations Between Five-Level Block Ratings and Child Outcomes, Centers Only

	Child Outcomes, Spring 2015			
	Story and Print Concepts	Peg Tapping Task	Letter Word Identification	Applied Problems
	Baseline	Baseline	Baseline	Baseline
QRIS Alternative Rating Block 5 Ratings				
Tier 1 or 2	-0.11	0.44‡	-0.05	0.03
Tier 4	0.19	1.23**	0.06	0.06
Site Characteristics				
First 5 Funding	0.28	0.62	0.08	-0.07
Title 5 Program	-0.25‡	-0.72**	0.02	-0.08*
Head Start Program	-0.11	-0.48	0.09	-0.11*
Private pay Children	0.02	0.48	0.06	-0.18*
Voucher pay Children	0.39‡	-0.14	0.00	0.01
Total site enrollment	0.00	0.00	0.00	0.00*
Toddler and Infant enrolled	-0.55*	-0.28	0.01	-0.12
Child Characteristics				
Male	-0.26**	-0.02	-0.07‡	0.00
Special needs	-0.54**	-1.31**	-0.22**	-0.14*
Spanish home language	0.50**	0.44	0.05	0.11*
Eng/Spanish home language	0.11	-0.08	-0.06‡	0.00
Other home language	0.27	0.26	0.41**	0.11
Fall score	0.33**	0.43**	0.52**	0.59**
Age at fall assessment	0.81**	2.18**	--	--
Days between assessments	0.00	-0.01	0.00	0.00
preLAS fall score	0.11**	0.18**	0.04**	0.02**
Model R^2	0.43	0.39	0.55	0.52

‡ $p < .10$, * $p < .05$; ** $p < .01$. N = 1511 to 1552 children

NOTE: Sites with a rating of 3 were the reference category

Exhibit 3D.30. Associations Between Element Average Ratings and Child Outcomes, All Programs

	Child Outcomes, Spring 2015			
	Story and Print Concepts	Peg Tapping Task	Letter Word Identification	Applied Problems
	Baseline	Baseline	Baseline	Baseline
QRIS Mean Rating				
Tier 1 or 2	0.54‡	0.69	0.07	0.00
Tier 4	0.10	-0.41	0.12‡	0.09*
Tier 5	0.35	0.76	0.19*	0.17*
Site Characteristics				
First 5 Funding	0.29	0.74	0.08	-0.07
Title 5 Program	-0.25‡	-0.70**	0.01	-0.09*
Head Start Program	-0.07	-0.47‡	0.11	-0.13**
Private pay Children	0.01	0.25	0.11	-0.19*
Voucher pay Children	0.38*	-0.09	0.05	0.05
Center	-0.21	0.02	-0.07	0.07
Total site enrollment	0.00	0.00	0.00	0.00*
Toddler and Infant enrolled	-0.62*	-0.21	-0.06	-0.11
Child Characteristics				
Male	-0.29*	-0.06	-0.08‡	0.00
Special needs	-0.49**	-1.24**	-0.20**	-0.13*
Spanish home language	0.54**	0.46	0.05	0.13**
Eng/Spanish home language	0.16	-0.06	-0.07‡	0.00
Other home language	0.23	0.24	0.39**	0.10
Fall score	0.33**	0.43**	0.52**	0.59**
Age at fall assessment	0.84**	2.22**	-	-
Days between assessments	-0.01	-0.01	0.00	0.00
preLAS fall score	0.11**	0.18**	0.04**	0.02**
Model R^2	0.44	0.39	0.55	0.53

‡ p < .10, * p < .05; ** p < .01. N = 1569 to 1611 children

NOTE: Sites with a rating of 3 were the reference category

Exhibit 3D.31. Associations Between Element Average Ratings and Child Outcomes, Centers Only

	Child Outcomes, Spring 2015			
	Story and Print Concepts	Peg Tapping Task	Letter Word Identification	Applied Problems
	Baseline	Baseline	Baseline	Baseline
QRIS Mean Rating				
Tier 1 or 2	0.94**	0.33	0.08	-0.05
Tier 4	0.07	-0.43	0.12	0.10**
Tier 5	0.32	0.69	0.19*	0.17*
Site Characteristics				
First 5 Funding	0.34	0.74	0.08	-0.07
Title 5 Program	-0.24‡	-0.75**	0.01	-0.08*
Head Start Program	-0.02	-0.48	0.11	-0.14**
Voucher pay Children	0.42*	-0.09	0.04	0.07
Total site enrollment	0.00	0.00	0.00	0.00*
Toddler and Infant enrolled	-0.60*	-0.14	-0.03	-0.14
Child Characteristics				
Male	-0.28**	-0.03	-0.07‡	0.01
Special needs	-0.53**	-1.30**	-0.21**	-0.12*
Spanish home language	0.50**	0.44	0.04	0.12*
Eng/Spanish home language	0.14	-0.01	-0.06‡	0.00
Other home language	0.26	0.25	0.40**	0.11
Fall score	0.33**	0.43**	0.52**	0.59**
Age at fall assessment	0.83**	2.20**	-	-
Days between assessments	0.00	-0.01	0.00	0.00
preLAS fall score	0.11**	0.18**	0.04**	0.02**
Model R^2	0.43	0.38	0.55	0.52

‡ $p < .10$, * $p < .05$; ** $p < .01$. N = 1511 to 1552 children

NOTE: Sites with a rating of 3 were the reference category

Appendix 4A. Provider Interview Protocol

Introduction

Good morning/afternoon, my name is [Name]. I'm working with the American Institutes for Research (AIR) on the evaluation of the Quality Rating and Improvement System (QRIS). Thanks for agreeing to participate. I'd like to tell you about it before we get started with the interview.

AIR is conducting an evaluation of the statewide QRIS. In [Name of county] it is called [Name of local QRIS].

The purpose of this interview is to gather information about your experience with the QRIS. We'd like to know about how the system has supported staff development and program quality improvement. Your responses will help the California Department of Education understand what's working and what's not in local quality improvement efforts. We also sent you a copy of the QRIS Hybrid Matrix, which we will discuss during this interview.

The information you share will be kept confidential and will only be used for research purposes. Neither your name nor the name of your program will be used in the reporting of these data.

The interview takes about an hour. For your participation in the interview, I will send you a $50 gift card to thank you for your time.

Your participation is voluntary. You may refuse to answer any question or stop participating at any time, without penalty.

We would like to tape-record the conversation to help us with note taking. Only members of the research team will listen to these recordings. You can ask us to turn off the tape recorder at any time during our discussion.

Do you have any questions?

Do you agree to participate in the interview?

[If yes:] Okay, let's get started.

DEMOGRAPHICS

1. Please tell me a bit about your role in the program where you work. What is your background in early childhood education (working with children 0-5)?
   a. Is participant a center director, site supervisor or equivalent?
      i. If yes, go to Q2.
      ii. If no, then ask for job title.

2. How long have you worked in the field of early childhood education? How long have you been at your current site? (if possible, month and year the person started at the current site)

FACTORS IMPACTING DECISION TO PARTICIPATE IN QRIS

The site where you work is part of the [Name of Local QRIS].
I'm interested in understanding why THE SITE agreed to participate in the QRIS, and what influenced YOUR participation as well.

3. Did YOUR SITE'S LEADERSHIP have in a choice in whether or not they wanted to participate? If yes, go to question #4. If no, skip to question #5.

4. Were you part of the decision for THE SITE to participate in the QRIS?
   a. If yes,
      i. What influenced the decision for THE SITE to participate? What factors were the MOST important? (open-ended then use prompts below if needed)
         1. To improve the quality of our program;
         2. To gain more professional recognition;
         3. To make our program more attractive to parents;
         4. To gain new ideas for our program;
         5. To get the grants and other financial incentives that RTT-ELC QRIS offers;
         6. To get the technical assistance that RTT-ELC QRIS offers;
         7. To attract and retain qualified staff;
         8. To increase our business; or
         9. Our site was expected to participate [e.g., because of its previous participation in other quality improvement initiatives (for example, Child Signature Program (CSP), Preschool for All, Power of Preschool, local preschool quality improvement initiative)].

ii. What MOST influenced the decision for THE SITE to participate? Why? (open-ended then use prompts below if needed)
    1. Professional Development for staff
        a. Coaching or mentoring supports;
        b. Noncredit courses, seminars, workshops or training programs;
        c. Credit bearing college or university courses; or
        d. Peer support activities.
    2. Staff Incentives
        a. Paid time off;
        b. Substitute teacher provided;
        c. Funds to help cover travel costs;
        d. Tuition support; or
        e. Other (probe for description).
    3. Site Incentives: Financial grants or awards for quality improvement
        a. Staff bonuses/stipends;
        b. General support for operating costs;
        c. Staff training/coaching;
        d. Materials/curriculum purchases; or
        e. Facilities improvements.
    4. Other
        a. Tiered reimbursement (Higher payment rates for programs at higher levels of quality); or
        b. Other technical assistance (TA) support.

b. If no, go to Q5.

5. Thinking about <u>YOUR OWN</u> decision to participate,

a. Was participation in the QRIS optional? If no, skip to question 6. If yes, go to item 5b.
b. What MOST influenced YOUR OWN decision to participate in the supports and activities? Why? (open-ended then use prompts below if needed)
    i. Professional Development for staff
        1. Coaching or mentoring supports;
        2. Noncredit courses, seminars, workshops or training programs;
        3. Credit bearing college or university courses; or
        4. Peer support activities,

ii. Staff Incentives:
    1. Paid time off;
    2. Substitute teacher provided;
    3. Funds to help cover travel costs;
    4. Tuition support; or
    5. Other (probe for description).
iii. Site Incentives : Financial Grants or awards for quality improvement
    1. Staff bonuses/stipends;
    2. General support for operating costs;
    3. Staff training/coaching;
    4. Materials/curriculum purchases; or
    5. Facilities improvements.
iv. Other
    1. Tiered reimbursement (i.e., higher payment rates for programs at higher levels of quality); or
    2. Other TA support.

6. Overall, has participation in [Name of Local QRIS] been beneficial to YOU AND/OR YOUR PROGRAM? Why? (open-ended then use prompts below if needed)
a. The technical assistance;
b. The grants and financial incentives;
c. The recognition I get from parents, other providers, or the public that I am providing high quality care;
d. Participation provides me with a marketing tool for my child care or preschool program;
e. The Environment Rating Scale (ERS) assessment process for my classrooms; and/or
f. The Classroom Assessment Scoring System (CLASS) assessment process for my classrooms.

PROGRESSING THROUGH THE QRIS TIERS

7. Do you know your site's current rating?
a. If yes,
    i What is your site's current rating? (Prompt if needed: Tier 1, 2, 3, 4 or 5)
    ii Given what you know about your site/program, do you think the rating accurately reflects the quality of your program? Why or why not?
b. If no, (prompt with options below and go to Q8)
    i Don't know
    ii Not yet rated

The QRIS provides supports for sites to help them improve quality and move up the five tiers/ratings. (Note: Interviewer should ask the interviewee to have the QRIS Hybrid Matrix before him/her).

8. Has your site moved up the tiers (i.e., increased its rating over time)?
   a. If yes,
      i What was the previous rating?
   b. If no, go to Q9.

9. Is your site currently working to move up the tiers or increase your rating? Why or why not?
   a. Do you expect your site to reach the next tier? Why or why not?
      i If yes,
         1. What are you doing to reach the next tier?
         2. When do you expect to reach the next tier?
         3. What are the barriers or challenges to moving up the tiers? (open-ended then use prompts below if needed)
            a. Finding the time to complete tasks required for the next level;
            b. Attainment of required staff education levels;
            c. Completion of required annual staff professional development training;
            d. Insufficient funding to meet standards or education requirements;
            e. Insufficient funding to increase and or sustain staff or director compensation (salary and benefits) to reward increased education levels;
            f. Getting the paperwork and documentation in order;
            g. Having to wait months to get the next ERS or CLASS assessment;
            h. Preparing for and meeting the required ERS score;
            i. Preparing for and meeting the required CLASS score; and/or
            j. Insufficient feedback and support from technical assistance provider.
      ii If no,
         1. What is preventing you from moving up? (open-ended then use prompts below if needed)
            a. Finding the time to complete tasks required for the next level;
            b. Attainment of required staff education levels;
            c. Completion of required annual staff professional development training;
            d. Insufficient funding to meet standards or education requirements;
            e. Insufficient funding to increase and or sustain staff or director; compensation (salary and benefits) to reward increased education levels;
            f. Getting the paperwork and documentation in order;
            g. Having to wait months to get the next ERS or CLASS assessment;
            h. Preparing for and meeting the required ERS score;
            i. Preparing for and meeting the required CLASS score; and/or
            j. Insufficient feedback and support from technical assistance provider.

   b. In your opinion, what aspects of the QRIS are most helpful for your site to improve quality and move up the tiers? (Open-ended then use prompts below if needed)

i Professional Development for staff
   1. Coaching or mentoring supports;
   2. Noncredit courses, seminars, workshops or training programs;
   3. Credit bearing college or university courses; and/or
   4. Peer support activities.

ii Staff Incentives
   1. Paid time off;
   2. Substitute teacher provided;
   3. Funds to help cover travel costs;
   4. Tuition support; and/or
   5. Other (probe for description).

iii Site Incentives : Financial Grants or awards for quality improvement
   1. Staff bonuses/stipends;
   2. General support for operating costs;
   3. Staff training/coaching;
   4. Materials/curriculum purchases; and/or
   5. Facilities improvements.

iv Other
   1. Tiered reimbursement; and/or
   2. Other TA support.

10. Thinking about the QRIS and the support it offers to improve quality,

a. What additional supports are needed?
b. How could the supports be more effective for YOUR SITE/PROGRAM?
c. In your view, what support is the most effective tool for improving program quality? (Ask open-ended question first, then probe as needed on the following supports]
   i. Targeted quality improvement grants (for a specific purpose);
   ii. Award to support continuous quality improvement;
   iii. Wage supplements;
   iv. Coaching;
   v. Management support;
   vi. Tiered reimbursement;
   vii. Other TA support; or
   viii. Other (probe for specifics).
d. Thinking about the frequency of professional development and/or the number of hours of professional development for staff, what level is needed to improve classroom quality?
e. What could be changed to reduce any barriers to improving quality?
f. How does staff compensation affect program quality or teacher effectiveness?

11. Thinking about the current QRIS standards [Ask the interviewee to refer to the QRIS Hybrid Matrix so that she/he can review the tier requirements]:

a. Are these the right aspects of quality to include in a QRIS rating scale? Are there standards that you don't think should be included? Which ones? Why? (probe on each below)
   i. Child observation;
   ii. Developmental and health screenings;
   iii. Minimum qualifications for Lead Teacher/Family Child Care Home;
   iv. Effective Teacher-Child Interactions: CLASS Assessments;
   v. Program Environment Rating Scale (ECERS-R, ITERS-R, FCCERS-R);
   vi. Ratios and Group Size (centers only); and/or
   vii. Director Qualifications (centers only).
b. Are there any that are particularly difficult to attain?

12. Are there any other aspects of quality that are missing?

ENGAGING AND INFORMING PARENTS

13. Do you share information about your site's participation in QRIS with enrolled families or prospective families?

a. If YES: In what ways, if any, can families' awareness of your program's participation in RTT-QRIS support or improve program quality? (Open-ended, then use prompts below if needed)
   i. Families that care more about quality will be more likely to enroll;
   ii. Parents will better understand our quality goals;
   iii. Parents will be more supportive of our QI efforts even when they may be inconvenient (e.g., staff training days); and/or
   iv. Parents may be more likely to share feedback on quality.
b. If NO, why not?

LOCAL SYSTEM OF SUPPORT FOR EARLY LEARNING AND QUALITY IMPROVEMENT

14. In your opinion, is the QRIS an effective way to improve the early childhood system in YOUR COUNTY/REGION? Why or why not?

15. Are you familiar with the QRIS activities happening in YOUR COUNTY/REGION (outside of your site)?

a. If yes,
    i. Are these activities supporting early learning and/or improving child care quality? Why or why not?
b. If no, go to Q16.

16. The QRIS is intended to make several changes, including enhancing program quality, improving child development and school readiness outcomes, and advancing the early care and education workforce.[8] Since the implementation of the [Name of local QRIS], have you seen any changes in YOUR COUNTY/REGION's local system of services that support these changes? If no, skip to question #17. If yes, go to item #16a.

a. What changes have you seen in your county/region's local system of services? [probe for details]
b. How does the local QRIS support these changes? Listen for (do not probe on) the following ways the local QRIS has supported each of the services below.
    i. Coaching and Mentoring;
    ii. Professional Development through formal education (i.e., Credit-bearing ECE courses, Degree-based cohort programs or other professional learning communities, other non-financial supports for students in degree programs);
    iii. Professional Development through non-credit bearing courses, seminars, workshops
    iv. Peer support networks/peer coaching
    v. Financial incentives
        1. For Professional Development (e.g., scholarships, stipends, wage supplements)
        2. For Program Improvement (e.g., higher rates of payment for programs at higher tiers/levels of quality, other financial awards)
c. Which of these supports are most effective in enhancing early learning and/or improving child care quality? Why?
d. How could the local system of services be further improved to support early learning and/or improve child care quality?
e. What changes have you seen in the coordination of local quality improvement initiatives and efforts? What else could be done to coordinate efforts?

[8] Table A-2 (pages 41-42) of the California RTT-ELC Federal Application.

DEMOGRAPHICS

We would like to end by asking you a few questions about your work experience and education.

17. What is the highest level of education you have completed so far? (Please select one.)

A. Some high school [go to Q19]
B. GED [go to Q19]
C. High School diploma [go to Q19]
D. Some college [no degree] [go to next question]
E. Associate's degree [go to next question]
F. Bachelor's degree [go to next question]
G. Some graduate coursework [go to next question]
H. Master's degree [go to next question]
I. Ed.D., Ph.D., J.D., or other higher degree [go to next question]

18. How many college units have you completed in Early Childhood or Child Development? (Please enter number for semester or quarter units as appropriate. If none, enter "0")

_____ Semester units completed
_____ Quarter units completed
_____ Some, but unsure of how many

19. How many college units have you completed in management/administration? (Please enter number for semester or quarter units as appropriate. If none, enter "0")

_____ Semester units completed
_____ Quarter units completed
_____ Some, but unsure of how many

20. Do you have a Child Development Site Supervisor Permit?

21. Do you have a Child Development Program Director Permit?

22. Are you currently enrolled in a college or university degree program?

☐ Yes, with an Early Childhood Education-related major
☐ Yes, with a non-ECE-related major
☐ Yes, no major decided yet
☐ No

23. What is your primary language? (interviewer fill in)

i. English
ii. Spanish
iii. A language other than English or Spanish

THANK YOU

Thank you for your time and thoughtful responses. For your participation, I would like to send you a $50 gift card.

24. Preferred type of card (Target/Amazon/Grocery)

25. Address or Email Address:

The results of these interviews will be used in the final report to the California Department of Education. If you'd like to see a copy of the report or if you have any questions about the study, contact Heather Quick, Project Director at HQuick@air.org. If you have any questions about your rights as a study participant, you may contact AIR's Institutional Review Board at irbchair@air.org or toll free at 1-800-634-0797.

Appendix 4B. Parent Focus Group Protocol

INTRODUCTION (5 min)

Distribute two copies of the consent form to each participant and have them sign and return one copy.
My name is [NAME] from Allen, Shea and Associates. I am working with the American Institutes for Research on an evaluation of California's Race to the Top Quality Rating and Improvement System (QRIS). In [*Name of County*] it is called [*Name of local QRIS*].

Thank you for agreeing to participate in this focus group. Before we get started, I'd like to tell you about the study.

The purpose of this focus group is to learn about how parents choose child care for their children, including what factors are most important when they choose a provider.

The focus group is not designed to judge how individual parents make child care choices or to rate or report on a child care provider. Rather, it is meant to understand what is important to parents.

Our discussion will take about an hour, and you will receive a $50 gift card as a thank you for your time and to offset your expenses for participating today/this evening.

The information you share will be kept confidential and will only be used for research purposes. Neither your name nor the name of your child's early care and education program will be used in the report. Your participation in this focus group is voluntary. You may refuse to answer any question, and you may leave the room at any time, without penalty.

We would like to tape-record the focus group discussions to help us with note taking. Only members of the research team will listen to these recordings. You can ask us to turn off the tape recorder at any time during our discussion.

There is no right or wrong answer. It is okay to disagree with another viewpoint you hear today.
Do you have any questions before we get started?

BACKGROUND (5 min)

1. Let's start by going around the room. Please briefly tell me:
   a. Your name,
   b. How many children you have who are younger than kindergarten age this year, and
   c. What types of child care or preschool provider you are currently using for each child, if any.

PARENT PERCEPTIONS OF CHILD CARE QUALITY *(10 min)*

2. How did you choose your current child care arrangement? What factors were important to you?
3. What does quality child care mean to you? How would you define it?
4. Where do/did you go for information about quality child care? Who do/did you talk to about quality child care?

   - *Prompt with name of the local QRIS if it does not come up in the discussion.*

ELEMENTS OF CHILD CARE QUALITY (FROM QRIS) (35 min)

The Quality Rating and Improvement System (QRIS) in your area, [Name of Local QRIS], looks at quality in three areas: Children's Learning and Development, Teacher Quality and Program Environment and Leadership.

We would like to understand how important these areas are to you as parents choosing and using child care.

I am going to read some statements to you and then I'm going to ask you some follow-up questions about the statements. *(Pass out the "Children" section of the QRIS document for parent focus groups)*

Children: A higher quality child care program is defined as one that assesses children and uses the findings to plan the curriculum and/or refer the families for further services.

Children's development and school readiness are measured by observing the children's school readiness skills and screening children for health or developmental needs.

5. Were these elements important to you when choosing a child care setting? Why or why not?
6. Do you know if these screenings for health or developmental needs are done at the child care setting that your child attends? If yes, have the results been shared with you?
7. Do you know if these observations of children's school readiness skills are done at the child care setting that your child attends? If yes, have the results been shared with you?

I am going to read some statements to you and then I'm going to ask you some follow-up questions about the statements.

Teachers: A higher quality child care program is described as one that employs teachers who have taken more classes and/or training about child development and early childhood learning. In addition, teachers are assessed to see how they are teaching and supporting children in the classroom. A higher quality child care program has teachers who talk with, play with, and teach children in ways that support their learning. *(Pass out the "Teacher" section of the QRIS document for parent focus groups)*

8. Were these elements important to you when choosing a child care setting? Why or why not?
9. Are you familiar with the training and qualifications of the teachers in your child's classroom? If yes, how do you know their training and qualifications? (Probe for how that information is shared with current/prospective parents).
10. Are you familiar with whether or not the teachers' skills are assessed in your child's classroom? If yes, how are the teachers' skills assessed?

I am going to read a statement to you and then I'm going to ask you some follow-up questions about the statement.

Program: A higher quality program is considered one that has a rich learning environment, fewer children per teacher and a qualified administrator/director. *(Pass out the "Program" section of the QRIS document for parent focus groups)*

11. Were these elements important to you when choosing a child care setting? Why or why not?
12. The learning environment is measured using a scale that includes many factors about the program. Are you familiar with the environment ratings for your child's classroom?

For those of you with children in child care centers rather than family child care homes:

13. Are you familiar with the staff/child ratio in your child's program? In other words, the number of teachers and the number of children in the classroom? (Centers only)
14. Are you familiar with the director/administrator's qualifications? In other words, their education and how often they attend trainings? (Centers only)

I am going to read a statement to you and then I'm going to ask you some follow-up questions about the statement.

Overall: Programs will be rated on the elements related to children, teachers and program and given an overall score. The score will give the program a rating between one (basic quality) and five (high quality).

15. In your opinion, is an overall score more or less useful than a score for each of the elements? Why?
16. Which elements are most important to you? Why?

AWARENESS OF QRIS RATING: **(15 min)** ***ONLY FOR CONSORTIA WHERE RATINGS ARE PUBLIC***

NOTE: ***If parents ask if their site has been rated or what their rating is, tell them that counties are in the process of rating sites, each county is in a different stage of the process; and you are not familiar with the status of ratings in the county.***

17. Are you familiar with the [NAME OF RATING SYSTEM] ratings?
    a. If yes,
        i. How did you find out about the [NAME OF RATING SYSTEM] ratings? (Website, other parents, service provider, child care provider, etc.)
        ii. Did you use the ratings when deciding on a child care setting? Why or why not?
        iii. Are you familiar with the [NAME OF RATING SYSTEM] rating for your child care setting? How does the rating influence your view of quality?
    b. If no, go to Q18

18. *(Show RATING SYSTEM materials and/or website for parents)* These materials are available on the [NAME OF RATING SYSTEM] website. Are you familiar with these materials?
    a. If yes,
        i. How did you find out about them? (Website, other parents, service provider, child care provider, etc.)
        ii. Please describe how you used the materials once you found them. (Used them to decide on child care, shared with family and/or friends, shared them with a service provider, shared them with a child care provider, etc.)
        iii. Were these materials useful? Why or why not?
    b. If no,
        i. Are these materials useful? Why or why not?
        ii. Would you use these materials to choose a child care provider? Why or why not?

CLOSING (5 minutes)

Thank you so much for your participation and your ideas today. In appreciation of your time, we have a gift card for each of the adult participants today.

You will need to write your name and provide your signature to acknowledge that you received the gift card. Your name WILL NOT be included in the focus group notes or the report. The information is only used to keep track of the gift card distribution.

Results of this focus group will be used in the evaluation of California's Race to the Top Quality Rating and Improvement System (QRIS). If you would like a copy of the report findings, you can contact your local QRIS.

Thank you again for your time.

Appendix 5A. Staff Survey

ID#_____
Please do not write your name or site's name on this survey.

CALIFORNIA QRIS STUDY
STAFF SURVEY SPRING 2015

INTRODUCTION AND CONSENT

Thank you for participating in this survey! This survey, developed for an evaluation study conducted by the American Institutes for Research (AIR) and RAND for the California Department of Education, is intended to collect information about the supports you have received to improve your practice with children, including coaching, formal education, and other activities.

Before you get started, here is some important information about the survey and about your responses:

- Your personal information will be kept confidential and will not be shared with anyone outside the research team.
- Results from this survey will never be presented in a way that would identify you or your program. In any written reports of the data obtained from this survey, your responses will be combined with others in summary form. Your responses will not be shared with other staff from your program.
- Your participation is voluntary. You may choose not to participate or to skip questions you do not wish to answer, without penalty. However, we encourage you to participate, as completing the survey gives you the opportunity to share your experiences, and your answers will help to inform our understanding of the supports received by early learning staff.
- There are no right or wrong answers. Your honest responses will help us understand how early learning staff are experiencing efforts to improve practice and promote children's learning.
- It should take you about 30-40 minutes to complete the survey. As a thank you for your time, please enjoy the $20 online gift card code included in your invitation letter. Upon your completion of the survey, we will send you a follow up email or letter with that same code for your records.
- If you run into problems or have questions when completing the survey, or if you would like more information about the study, please contact us at caqrisstudy@rand.org.
- For questions regarding your rights as a participant in this study, you may contact AIR's Institutional Review Board (IRB) at IRBchair@air.org or 1-800-634-0797.

By starting the survey, you are indicating that you have read and understood the information provided to you and agree to participate in this survey.

SECTION A: PARTICIPATION IN QUALITY IMPROVEMENT ACTIVITIES

This survey asks about your participation in quality improvement activities or efforts designed to improve your early childhood practice and your program's quality. You may have participated in several of the types of activities or efforts listed, or you may have participated in just one or none of these activities, and that is okay, too. Please tell us just about the activities you have participated in.

A01.

Please indicate whether you have received any of the following types of support to improve your practice or program quality from JUNE 2014 through MARCH 2015.

(Select one response for each row.)

1. Coaching or mentoring supports **Support for individualized professional development, usually one-on-one or as part of a classroom team, provided to you by a coach, mentor, or advisor to help improve your practice or to promote quality improvement more generally.**	☐ **Yes, I received coaching or mentoring support** *[Please complete Section B]*	☐ **No, I did not** *[Do not complete Section B]*
2. Noncredit courses, seminars, workshops, or training programs **A training activity that may be one-time or part of a series (including courses that provide Continuing Education Units but not including courses taken for formal college credit through a college or university).**	☐ **Yes, I participated in noncredit training** *[Please complete Section C]*	☐ **No, I did not** *[Do not complete Section C]*
3. Credit-bearing college or university courses **Course(s) you completed for unit credit at a two- or four-year college or university.**	☐ **Yes, I took credit-bearing courses** *[Please complete Section D]*	☐ **No, I did not** *[Do not complete Section D]*
4. Peer support activities **Formal arrangements such as learning communities, peer support networks, or reciprocal peer coaching to discuss shared experiences and exchange ideas, information, and strategies for professional development or for program improvement more generally. Please do not include informal or occasional discussions with colleagues.**	☐ **Yes, I participated in peer support activities** *[Please complete Section E]*	☐ **No, I did not** *[Do not complete Section E]*

SECTION B: COACHING OR MENTORING SUPPORTS

B01.

Approximately how many hours of coaching/mentoring did you receive each month from JUNE 2014 through MARCH 2015?

(Please write number of hours for each month. If none, write "0".)

	Total number of hours per month
June 2014	
July 2014	
August 2014	
September 2014	
October 2014	
November 2014	
December 2014	
January 2015	
February 2015	
March 2015	

B02.

About how often did you receive coaching/mentoring visits or contacts during the JUNE 2014 through MARCH 2015 period?

(Please select one category for each month.)

	Not at all	1 or 2 times	3 or 4 times	5 or more times
June 2014	☐	☐	☐	☐
July 2014	☐	☐	☐	☐
August 2014	☐	☐	☐	☐
September 2014	☐	☐	☐	☐
October 2014	☐	☐	☐	☐
November 2014	☐	☐	☐	☐
December 2014	☐	☐	☐	☐
January 2015	☐	☐	☐	☐
February 2015	☐	☐	☐	☐
March 2015	☐	☐	☐	☐

Section B: Coaching or Mentoring Supports

B03.

Approximately what percentage of your overall coaching/mentoring hours did you spend on the following specific content areas from JUNE 2014 through MARCH 2015?

(Please select one category for each content area.)

	No Time	25% or less of time	Between 25% and 50% of time	Between 50% and 75% of time	75% or more of time
Language development/literacy	☐	☐	☐	☐	☐
Math/cognitive development	☐	☐	☐	☐	☐
Social and emotional development	☐	☐	☐	☐	☐

Section B: Coaching or Mentoring Supports

B04.

What other content areas were addressed through the coaching/mentoring support you received from JUNE 2014 through MARCH 2015?

(Please select all that apply.)

Child development and instructional practice	Select all that apply
Subjects other than language development or math, such as science or music	☐
Materials and learning environment	☐
Physical development and health	☐
English language development (for dual language learners)	☐
A specific curriculum	☐
Special needs or inclusion	☐
California Preschool Learning Foundations and Frameworks	☐
Cultural/language diversity	☐
Teacher-child interactions	☐
Relationship-based practices with infants and toddlers	☐
Child behavior management	☐
Classroom management	☐
Assessment	
Child assessment and developmental screening (such as DRDP, Ages and Stages Questionnaire)	☐
Understanding scores on ECERS/FCCRS/ITERS or help to improve these scores	☐
Understanding scores on CLASS or help to improve these scores	☐
Program improvement support	
Family engagement	☐
Accreditation	☐
Business practices, program management, and/or fiscal management	☐
Licensing issues	☐
Health and safety	☐
Other	
Other content area (please specify below): _____	☐

Section B: Coaching or Mentoring Supports

B05.

How did you receive coaching/mentoring support from JUNE 2014 through MARCH 2015?

(Please select all that apply.)

- ☐ In person at my center or family child care home
- ☐ In person offsite away from my center or family child care home
- ☐ By phone
- ☐ Online/email/video
- ☐ By regular mail

B06.

Were there any incentives or requirements for you to participate in this coaching/mentoring activity from JUNE 2014 through MARCH 2015?

(Please select all that apply.)

- ☐ Received financial stipend
- ☐ Received free classroom materials
- ☐ Received priority enrollment
- ☐ Required by my center or family child care home
- ☐ Required for other reason
- ☐ Wanted to participate for my own self improvement
- ☐ Other (please specify): _____
- ☐ No incentives

Section B: Coaching or Mentoring Supports

B07.

Do you know if the coaching/mentoring support you received from JUNE 2014 through MARCH 2015 was provided through any of the following programs?

(Please select all that apply.)

	In all counties
☐	AB212 or CARES Plus advisors
☐	CA Early Childhood Mentor Program
☐	CA Preschool Instructional Network (CPIN) coaches and on-site T&TA
☐	California Inclusion and Behavior Consultation Network (CIBC)
☐	Child Signature Program (CSP)
☐	CSEFEL (Collaborative on the Social and Emotional Foundations for Early Learning)/Teaching Pyramid
☐	Head Start coaches
☐	My Teaching Partner
☐	Partners for Quality (PITC)
	In Alameda County
☐	Quality Counts generalist coaches
	In Fresno County
☐	Early Stars coaches
☐	PIECES advisor (AB212 and CARES Plus advisors)
	In Los Angeles County
☐	ASPIRE advisor (CARES plus)
☐	Gateways
☐	RTT Coaches or Early Education Specialists
☐	Stipend Program advisor (AB212)
	In Orange County
☐	Early Education coaching
	In Sacramento County
☐	Preschool Bridging Model (PBM) ECE Specialists
☐	Quality Child Care Collaborative
	In San Diego County
☐	Preschool for All (PFA)
☐	Quality Preschool Initiative (QPI) Coaching
☐	WestEd Pyramid/All Aboard!/Pyramid Model (CSEFEL)
☐	YMCA CARES Teacher Retention Program advisor (AB212)
	In San Francisco County
☐	Coaching Collaborative
☐	Preschool for All/Pathways to Quality
☐	San Francisco Department of Public Health
☐	San Francisco Quality Connections

Section B: Coaching or Mentoring Supports

	In San Joaquin County
☐	Race to the Top Advisors/Raising Quality! Coaching
	In Santa Clara County
☐	Coaching Collaborative
☐	RTT Coaches
☐	Video Coaching Program
	In Ventura County
☐	ECE Stipend Project advisor (CARES-Plus and AB212)
☐	QRIS Technical Assistance Specialists (TAS)
	Other
☐	Other program (please provide program name): _____
☐	Don't know/uncertain

SECTION C: NONCREDIT COURSES, SEMINARS, WORKSHOPS, OR TRAINING PROGRAMS

C01.

Thinking about all of the noncredit courses, seminars, workshops, and training programs that you participated in from JUNE 2014 through MARCH 2015, approximately how many total hours did you participate each month?

(Please write number of hours for each month. If none, write "0".)

Please do not include any time spent in coaching/mentoring activities or courses enrolled in through a college or university.

	Total number of hours per month
June 2014	
July 2014	
August 2014	
September 2014	
October 2014	
November 2014	
December 2014	
January 2015	
February 2015	
March 2015	

C02.

Approximately what percentage of your overall hours in noncredit courses, seminars, workshops, or training programs did you spend on the following specific content areas from JUNE 2014 through MARCH 2015?

(Please select one category for each content area.)

	No Time	25% or less of time	Between 25% and 50% of time	Between 50% and 75% of time	75% or more of time
Language development/literacy	☐	☐	☐	☐	☐
Math/cognitive development	☐	☐	☐	☐	☐

Section C: Noncredit Courses, Seminars ,Workshops, or Training Programs

Social and emotional development	☐	☐	☐	☐	☐

C03.

What <u>other content areas</u> were addressed through the <u>noncredit courses, seminars, workshops, or training programs</u> that you participated in from JUNE 2014 through MARCH 2015?

(Please select all that apply.)

Child development and instructional practice	Select all that apply
Subjects other than language development or math, such as science or music	☐
Materials and learning environment	☐
Physical development and health	☐
English language development (for dual language learners)	☐
A specific curriculum	☐
Special needs or inclusion	☐
California Preschool Learning Foundations and Frameworks	☐
Cultural/language diversity	☐
Teacher-child interactions	☐
Relationship-based practices with infants and toddlers	☐
Child behavior management	☐
Classroom management	☐
Assessment	
Child assessment and developmental screening (such as DRDP, Ages and Stages Questionnaire)	☐
Understanding scores on ECERS/FCCRS/ITERS or help to improve these scores	☐
Understanding scores on CLASS or help to improve these scores	☐
Program improvement support	
Family engagement	☐
Accreditation	☐
Business practices, program management, and/or fiscal management	☐
Licensing issues	☐
Health and safety	☐
Other	
Other content area (please specify below): _____	☐

Section C: Noncredit Courses, Seminars ,Workshops, or Training Programs

C04.

Thinking about all of the noncredit courses, seminars, workshops, or training programs that you participated in from JUNE 2014 through MARCH 2015, please indicate how you participated.

(Please select all that apply.)

- ☐ In person at my center or family child care home
- ☐ In person offsite away from my center or family child care home
- ☐ Online/email
- ☐ Other (please specify): _____

C05.

Were there any incentives or requirements for you to participate in any of the noncredit-bearing seminars, workshops, courses, or training programs from JUNE 2014 through MARCH 2015?

(Please select all that apply.)

- ☐ Received financial stipend
- ☐ Provided to me for free
- ☐ Received free classroom materials
- ☐ Received priority enrollment
- ☐ Required by my center or family child care home
- ☐ Required for other reason
- ☐ Wanted to participate for my own self improvement
- ☐ Other (please specify): _____
- ☐ No incentives

Section C: Noncredit Courses, Seminars ,Workshops, or Training Programs

C06.

Do you know if the support you received through noncredit courses, seminars, workshops, or training programs from JUNE 2014 through MARCH 2015 was provided through any of the following programs?

(Please select all that apply.)

	In all counties
☐	AB212 or CARES Plus
☐	CA Preschool Instructional Network (CPIN)
☐	California Care Initiative Project (CCIP)
☐	CSEFEL (Collaborative on the Social and Emotional Foundations for Early Learning)/Teaching Pyramid
☐	Desired Results Field Training (DRDP)
☐	English Language Learners Support/Dual Language Learners (training on Preschool English Learners resource guide, provided by CPIN)
☐	Family Child Care at its Best
☐	The Program for Infant/Toddler Care (PITC)
	In Alameda County
☐	Help Me Grow
	In Fresno County
☐	Fresno Accreditation Institute (FAI)
☐	Help Me Grow
☐	PIECES (AB212 and CARES Plus)
	In Los Angeles County
☐	ASPIRE (CARES plus)
☐	Gateways/R&R Training Workshops
☐	Pacific Oaks Leadership Institute
☐	Stipend Program (AB212)
	In Orange County
☐	Help Me Grow
☐	Project Inspire Target Corporation Grant
☐	Services for Early Education and Development (SEED)
	In Sacramento County
☐	Beanstalk
☐	Quality Child Care Collaborative
	In San Diego County
☐	Quality Preschool Initiative (QPI) Workshops
☐	WestEd Pyramid/All Aboard!/Pyramid Model (CSEFEL)
☐	YMCA CARES Teacher Retention Program (AB212)
☐	YMCA Child Care Initiative
	In San Joaquin County
☐	First 5 San Joaquin Quality Improvement

Section C: Noncredit Courses, Seminars ,Workshops, or Training Programs

	In Ventura County
☐	ECE Stipend Project advisor (CARES-Plus and AB212)
	Other
☐	Other program (please provide program name): _____
☐	Don't know/uncertain

SECTION D: CREDIT-BEARING COLLEGE OR UNIVERSITY COURSES

In this section, please describe any credit-bearing college or university courses you enrolled in from JUNE 2014 through MARCH 2015.

How many SUMMER 2014, FALL 2014, and WINTER 2015 college or university course units did you complete?

(Please write number of units you completed for your semester or quarter classes, as appropriate, or write "0".)

D01.

Total units completed across all SUMMER 2014 courses:

_____Semester units completed

_____Quarter units completed

D01_2

Total units completed across all FALL 2014 courses:

_____Semester units completed

_____Quarter units completed

D01_3

Total units completed across all WINTER 2015 courses:

_____Semester units completed

_____Quarter units completed

D02.

Where did you attend classes between JUNE 2014 and MARCH 2015?

(Please select all that apply.)

- ☐ In person, on college campus
- ☐ In person, off college campus
- ☐ Online through college
- ☐ Other (please specify): _____

Section D: Credit-Bearing College or University Courses

D03.

Did you receive a financial stipend or scholarship to take a college or university course between JUNE 2014 and MARCH 2015?

- ☐ Yes
- ☐ No
- ☐ Don't know

D04.

Did you receive any supports while enrolled in a college or university course between JUNE 2014 and MARCH 2015?

(Please select all that apply.)

- ☐ Tutoring
- ☐ Academic counseling or advisement
- ☐ Peer support groups
- ☐ Career guidance
- ☐ Language support (such as courses provided in your primary language, translation)
- ☐ Access to resources (such as book lending, technology or computer support)
- ☐ Other (please specify): _____
- ☐ No support received

Section D: Credit-Bearing College or University Courses

D05.

Do you know if a financial stipend/scholarship or any support you received for a college or university course between JUNE 2014 and MARCH 2015 was provided through any of the following programs?

(Please select all that apply.)

	In all counties
☐	AB212 or CARES Plus
☐	Child Development Grant (Student Aid Commission)
☐	Child Development Training Consortium
☐	Child Signature Program (CSP)
☐	Family Child Care at its Best
	In Fresno County
☐	PIECES (AB212 and CARES Plus)
	In Los Angeles County
☐	ASPIRE (CARES plus)
☐	ECE Workforce Initiative or Child Development Workforce Initiative
☐	Project Vistas
☐	Stipend Program (AB212)
	In San Diego County
☐	YMCA CARES Teacher Retention Program (AB212)
	In San Francisco County
☐	Metro Early Childhood Academy
☐	SF SEED
	In Santa Clara County
☐	San Jose State University BA Cohort
	In Ventura County
☐	ECE Stipend Project (CARES-Plus and AB212)
	Other
☐	Other program (please provide program name): _____
☐	Don't know/uncertain

Section D: Credit-Bearing College or University Courses

D06.

What was the focus of the credit-bearing college or university course(s) in which you were enrolled between JUNE 2014 and MARCH 2015?

(Please select one.)

- ☐ Early Childhood Education (ECE) course(s) *[Go to question D06_1 below]*
- ☐ Non-ECE course(s) *[Skip question D06_1 below]*
- ☐ Both ECE and non-ECE courses *[Go to question D06_1 below]*

D06_1

Which of these topic areas was the focus of the credit-bearing college or university ECE course(s) in which you were enrolled between JUNE 2014 and MARCH 2015?

(Please select all that apply.)

- ☐ Child growth and development
- ☐ Child, family and community
- ☐ Introduction to curriculum
- ☐ Principles and practices of teaching young children
- ☐ Observation and assessment
- ☐ Health, safety and nutrition
- ☐ Teaching in a diverse society
- ☐ Practicum
- ☐ Special needs child
- ☐ Other ECE course focus (please specify): _____

SECTION E: PEER SUPPORT ACTIVITIES

E01.

Approximately how many hours of formal peer support from early education colleagues did you receive each month from JUNE 2014 through MARCH 2015?

(Please write number of hours for each month. If none, write "0".)

	Total number of hours per month
June 2014	
July 2014	
August 2014	
September 2014	
October 2014	
November 2014	
December 2014	
January 2015	
February 2015	
March 2015	

E02.

About how often did you receive formal peer support during the JUNE 2014 through MARCH 2015 period?

(Please select one category for each month.)

	Not at all	1 or 2 times	3 or 4 times	5 or more times
June 2014	☐	☐	☐	☐
July 2014	☐	☐	☐	☐
August 2014	☐	☐	☐	☐
September 2014	☐	☐	☐	☐
October 2014	☐	☐	☐	☐
November 2014	☐	☐	☐	☐
December 2014	☐	☐	☐	☐
January 2015	☐	☐	☐	☐
February 2015	☐	☐	☐	☐
March 2015	☐	☐	☐	☐

Section E: Peer Support Activities

E03.

Approximately what percentage of your overall formal peer support hours did you spend on the following specific content areas from JUNE 2014 through MARCH 2015?

(Please select one category for each content area.)

	No Time	25% or less of time	Between 25% and 50% of time	Between 50% and 75% of time	75% or more of time
Language development/literacy	☐	☐	☐	☐	☐
Math/cognitive development	☐	☐	☐	☐	☐
Social and emotional development	☐	☐	☐	☐	☐

Section E: Peer Support Activities

E04.

What other content areas were addressed through the formal peer support you received from JUNE 2014 through MARCH 2015?

(Please select all that apply.)

Child development and instructional practice	Select all that apply
Subjects other than language development or math, such as science or music	☐
Materials and learning environment	☐
Physical development and health	☐
English language development (for dual language learners)	☐
A specific curriculum	☐
Special needs or inclusion	☐
California Preschool Learning Foundations and Frameworks	☐
Cultural/language diversity	☐
Teacher-child interactions	☐
Relationship-based practices with infants and toddlers	☐
Child behavior management	☐
Classroom management	☐
Assessment	
Child assessment and developmental screening (such as DRDP, Ages and Stages Questionnaire)	☐
Understanding scores on ECERS/FCCRS/ITERS or help to improve these scores	☐
Understanding scores on CLASS or help to improve these scores	☐
Program improvement support	
Family engagement	☐
Accreditation	☐
Business practices, program management, and/or fiscal management	☐
Licensing issues	☐
Health and safety	☐
Other	
Other content area (please specify below): _____	☐

Section E: Peer Support Activities

E05.

How did you receive this formal peer support from JUNE 2014 through MARCH 2015?

(Please select all that apply.)

- ☐ In person at my center or family child care home
- ☐ In person offsite away from my center or family child care home
- ☐ By phone
- ☐ Online/email

E06.

Were there any incentives or requirements for you to participate in this formal peer support activity from JUNE 2014 through MARCH 2015?

(Please select all that apply.)

- ☐ Received financial stipend
- ☐ Received free classroom materials
- ☐ Received priority enrollment
- ☐ Required by my center or family child care home
- ☐ Required for other reason
- ☐ Wanted to participate for my own self improvement
- ☐ Other (please specify): _____
- ☐ No incentives

E07.

Was the formal peer support you received from JUNE 2014 through MARCH 2015 provided through a particular program? If so, what is the name of the program?

(Please select any that apply.)

- ☐ Not provided through a specific program
- ☐ Provided through a specific program (please provide program name):_____
- ☐ Don't know/uncertain

SECTION F: HELPFULNESS

F01.

How helpful has the support provided by the following activities from JUNE 2014 through MARCH 2015 been for improving your practice with children in your classroom?

(Please select one option per row.)

[Only answer for those supports for which you answered "yes" in question A01.]

	Not helpful	Somewhat helpful	Helpful	Very helpful
Coaching/mentoring	☐	☐	☐	☐
Noncredit courses, seminars, workshops, or training programs	☐	☐	☐	☐
Credit-bearing college or university courses	☐	☐	☐	☐
Formal peer support	☐	☐	☐	☐

F02.

Which one of the quality improvement efforts you participated in from JUNE 2014 through MARCH 2015 do you feel was most helpful in improving your effectiveness as a teacher or family child care provider?

(Please select one.)

[Only choose among those supports for which you answered "yes" in question A01.]

☐ Coaching/mentoring
☐ Noncredit courses, seminars, workshops, or training programs
☐ Credit-bearing summer college or university courses
☐ Formal peer support activities

SECTION G: FINANCIAL INCENTIVES: JULY 2013-JUNE 2014 AND JULY 2014-JUNE 2015

The next questions ask about the dollar value of any incentives you have received (or expect to receive) and the effects of these incentives on your quality improvement activity choices. Please note, for the following questions we are now asking about two different 12-month time periods, from JULY 2013 through JUNE 2014, and from JULY 2014 through JUNE 2015.

FINANCIAL INCENTIVES: JULY 2013-JUNE 2014

G01.

Did you receive any financial incentives, such as scholarships or stipends, to promote your participation in quality improvement efforts between JULY 2013 and JUNE 2014?

☐ Yes *[Go to question G02]*
☐ No *[Go to question G05]*
☐ Don't know or don't care to answer *[Go to question G05]*

G02.

About how much was the financial incentive you personally received from July 2013 through June 2014? (Not including any incentive provided to your center or program.)

(Please write in a number without commas or a dollar sign. For example, if you received $1,200 you would write 1200.)

How much did you personally receive? $_____ [Write number]

G03.

What types of quality improvement efforts did these financial incentives cover from July 2013 through June 2014?

(Please select all that apply.)

☐ Coaching/mentoring
☐ Noncredit courses, seminars, workshops, or training programs
☐ Credit-bearing college or university courses
☐ Formal peer support activities
☐ Other (please specify): _____

Section G: Financial Incentives – July 2013 through June 2014

G04.

Please indicate which of the programs below provided the financial incentives you received from July 2013 through June 2014.

(Please select all that apply.)

	In all counties
☐	AB212 or CARES Plus
☐	Career Incentive Grants (Child Development Training Consortium - CDTC)
☐	Child Development Grant (Student Aid Commission)
☐	Child Development Permit Stipends (CDTC)
☐	Child Signature Program (CSP)
☐	ECE Student Career and Education Program (CDTC)
	In Fresno County
☐	PIECES (AB212 and CARES Plus)
	In Los Angeles County
☐	ASPIRE (CARES plus)
☐	ECE Workforce Initiative or Child Development Workforce Initiative
☐	Stipend Program (AB212)
	In San Diego County
☐	Quality Preschool Initiative (QPI) stipend
☐	YMCA CARES Teacher Retention Program (AB212)
	In San Francisco County
☐	SF SEED
	In San Joaquin County
☐	RTT-ELC QRIS Scholarship
	In Santa Clara County
☐	San Jose State University BA Cohort
	In Ventura County
☐	ECE Stipend Project (CARES-Plus and AB212)
	Other
☐	Other program (please provide program name): _____
☐	Don't know/uncertain

G05.

How important was the availability of financial incentives in your decision to participate in quality improvement efforts from July 2013 through June 2014?

(Please select one.)

☐ Not important
☐ Somewhat important
☐ Important
☐ Very important

Section G: Financial Incentives – July 2014 through June 2015

FINANCIAL INCENTIVES: JULY 2014-JUNE 2015

Now we are asking about a different 12-month time period.

G06.

Did you receive or do you expect to receive any financial incentives, such as scholarships or stipends, to promote your participation in quality improvement efforts between JULY 2014 and JUNE 2015?

☐ Yes *[Go to question G07]*
☐ No *[Go to question G10]*
☐ Don't know or don't care to answer *[Go to question G10]*

G07.

About how much was the financial incentive you personally received or expect to receive from JULY 2014 through JUNE 2015? (Not including any incentive provided to your center or program.)

(Please write a number without commas or a dollar sign. For example, if you received $1,200 you would write 1200.)

How much did you personally receive? $_____ [Write number]

G08.

What types of quality improvement efforts did or will these financial incentives cover from July 2014 through June 2015?

(Please select all that apply.)

☐ Coaching/mentoring
☐ Noncredit courses, seminars, workshops, or training programs
☐ Credit-bearing college or university courses
☐ Formal peer support activities
☐ Other (please specify): _____

Section G: Financial Incentives – July 2014 through June 2015

G09.

Please indicate which of the programs below provided the financial incentives you received or will receive from JULY 2014 through JUNE 2015.

(Please select all that apply.)

	In all counties
☐	AB212 or CARES Plus
☐	Career Incentive Grants (Child Development Training Consortium - CDTC)
☐	Child Development Grant (Student Aid Commission)
☐	Child Development Permit Stipends (CDTC)
☐	Child Signature Program (CSP)
☐	ECE Student Career and Education Program (CDTC)
	In Fresno County
☐	PIECES (AB212 and CARES Plus)
	In Los Angeles County
☐	ASPIRE (CARES plus)
☐	ECE Workforce Initiative or Child Development Workforce Initiative
☐	Stipend Program (AB212)
	In San Diego County
☐	Quality Preschool Initiative (QPI) stipend
☐	YMCA CARES Teacher Retention Program (AB212)
	In San Francisco County
☐	SF SEED
	In San Joaquin County
☐	RTT-ELC QRIS Scholarship
	In Santa Clara County
☐	San Jose State University BA Cohort
	In Ventura County
☐	ECE Stipend Project (CARES-Plus and AB212)
	Other
☐	Other program (please provide program name): _____
☐	Don't know/uncertain

G10.

How important was the availability of financial incentives in your decision to participate in quality improvement efforts from July 2014 through June 2015?

(Please select one.)

☐ Not important
☐ Somewhat important
☐ Important
☐ Very important

SECTION H: PREVIOUS INVOLVEMENT IN QUALITY IMPROVEMENT ACTIVITY: JUNE 2013-MAY 2014

The next few questions concern the 12-month period from JUNE 2013 through MAY 2014.

H01.

During the 12-month period from JUNE 2013 through MAY 2014, did you receive any support of the following types to improve your practice or program quality?

(For each type of support received, please indicate the approximate number of hours of involvement over the 12-month period.)

Type of Support	None	8 hours or less	9-24 hours	25-40 hours	More than 40 hours
Coaching/mentoring	☐	☐	☐	☐	☐
Noncredit courses, seminars, workshops, or training programs	☐	☐	☐	☐	☐
Formal peer support activities	☐	☐	☐	☐	☐

H02.

Did you complete any SUMMER 2013, FALL 2013, or WINTER/SPRING 2014 college or university courses?

☐ Yes *[Go to next questions: H02_1 through H02_3]*
☐ No *[Go to question H03]*

Section H: Previous Quality Improvement Activity – June 2013 through May 2014

H02_1 through H02_3.

How many summer 2013, fall 2013, and winter/spring 2014 college or university course units did you complete?

(Please write in number of units you completed for your semester or quarter classes, as appropriate, or write 0.)

H02_1

Total units completed across all Summer 2013 courses:

_____Semester units completed

_____Quarter units completed

H02_2

Total units completed across all Fall 2013 courses:

_____Semester units completed

_____Quarter units completed

H02_3

Total units completed across all Winter/Spring 2014 courses:

_____Semester units completed

_____Quarter units completed

Section H: Previous Quality Improvement Activity – June 2013 through May 2014

H03.

Thinking about all the types of quality improvement support you received from JUNE 2013 through MAY 2014, please indicate the three content areas where you received the most hours of support.

(Please select only three.)

Child development and instructional practice	3 areas with most hours received
Language development/literacy	☐
Math/cognitive development	☐
Social and emotional development	☐
Subjects other than language development or math, such as science or music	☐
Materials and learning environment	☐
Physical development and health	☐
English language development (for dual language learners)	☐
A specific curriculum	☐
Special needs or inclusion	☐
California Preschool Learning Foundations and Frameworks	☐
Cultural/language diversity	☐
Teacher-child interactions	☐
Relationship-based practices with infants and toddlers	☐
Child behavior management	☐
Classroom management	☐
Assessment	
Child assessment and developmental screening (such as DRDP, Ages and Stages Questionnaire)	☐
Understanding scores on ECERS/FCCRS/ITERS or help to improve these scores	☐
Understanding scores on CLASS or help to improve these scores	☐
Program improvement support	
Family engagement	☐
Accreditation	☐
Business practices, program management, and/or fiscal management	☐
Licensing issues	☐
Health and safety	☐
Other	
Other content area (please specify below): _____	☐

SECTION I: CHOOSING QUALITY IMPROVEMENT ACTIVITIES

I01.

How do you learn about quality improvement activities and supports in your county?

(Please select all that apply.)

- ☐ Through my program or program director
- ☐ Through my County Office of Education
- ☐ Through First 5 California
- ☐ Through my local county-level First 5
- ☐ Through my local R&R
- ☐ Through my local QRIS
- ☐ Through my own research
- ☐ Through my colleagues
- ☐ Other (please specify): _____

I02.

How do you decide which quality improvement supports to participate in?

(Please select all that apply.)

- ☐ Personal interest in topic or activity
- ☐ Identified as part of your classroom or site Quality Improvement Plan
- ☐ Supervisor recommended it for me
- ☐ Required to attain educational degree or credential
- ☐ Financial incentives offered
- ☐ Other (please specify): _____

I03.

What barriers prevent you from participating in quality improvement activities in your county?

(Please select all that apply.)

- ☐ I don't have enough time.
- ☐ The activities I want to participate in are too expensive.
- ☐ The activities I want to participate in are too far away or difficult to get to.
- ☐ I am unable to find or pay for child care
- ☐ The activities I want to participate in are not provided in my primary language.
- ☐ The activities will not benefit me or my practice with children enough to justify the time and expense required.
- ☐ Other (please specify): _____
- ☐ No barriers prevent my participation

Section I: Choosing Quality Improvement Activities

I04.

Please select each topic area below that you would like to learn more about to improve your practice or achieve career goals.

(Please select all that apply.)

Child development and instructional practice	Want more support or training on this topic
Language development/literacy	☐
Math/cognitive development	☐
Social and emotional development	☐
Subjects other than language development or math, such as science or music	☐
Materials and learning environment	☐
Physical development and health	☐
English language development (for dual language learners)	☐
A specific curriculum	☐
Special needs or inclusion	☐
California Preschool Learning Foundations and Frameworks	☐
Cultural/language diversity	☐
Teacher-child interactions	☐
Relationship-based practices with infants and toddlers	☐
Child behavior management	☐
Classroom management	☐
Assessment	
Child assessment and developmental screening (such as DRDP, Ages and Stages Questionnaire)	☐
Understanding scores on ECERS/FCCRS/ITERS or help to improve these scores	☐
Understanding scores on CLASS or help to improve these scores	☐
Program improvement support	
Family engagement	☐
Accreditation	☐
Business practices, program management, and/or fiscal management	☐
Licensing issues	☐
Health and safety	☐
Other	
Other content area (please specify below): _____	☐

SECTION J: DEMOGRAPHIC INFORMATION

J01.

What is the highest level of education you have completed so far?

☐ Some high school *[Go to question J03]*
☐ GED *[Go to question J03]*
☐ High School diploma *[Go to question J03]*
☐ Some college [no degree] *[Go to question J01_1]*
☐ Associate's degree *[Go to question J02]*
☐ Bachelor's degree *[Go to question J02]*
☐ Some graduate coursework *[Go to question J02]*
☐ Master's degree *[Go to question J02]*
☐ Ed.D., Ph.D., J.D., or other higher degree *[Go to question J02]*

J01_1.

How many total college units have you completed?

_____[Write number]

J02.

How many college units have you completed in Early Childhood or Child Development?

(Please write number for semester or quarter units, as appropriate. If none, write "0".)

_____ Semester units completed

_____ Quarter units completed

J03.

Are you currently enrolled in a college or university degree program?

☐ Yes, with an Early Childhood-related major
☐ Yes, with a non-EC-related major
☐ Yes, no major decided yet
☐ No

J04.

Including years of teaching in other programs, how many years have you taught children birth to age 5?

_____ Years [Write number]

_____ If less than one year, how many months? [Write number]

Section J: Demographic Information

J05.

Are you of Hispanic or Latino origin?

- ☐ Yes
- ☐ No
- ☐ Don't Know

J06.

What is your race? (Select all that apply.)

- ☐ White (Caucasian)
- ☐ Black or African American
- ☐ Asian
- ☐ American Indian, Alaska Native
- ☐ Native Hawaiian
- ☐ Other Pacific Islander
- ☐ Other (please specify): _____
- ☐ Don't Know

J07.

What is your age?

- ☐ Under 20
- ☐ 20-29
- ☐ 30-39
- ☐ 40-49
- ☐ 50-59
- ☐ 60 or over

J08.

What is your primary language?

- ☐ English *[Go to question K01]*
- ☐ Spanish *[Go to question J08_1]*
- ☐ A language other than English or Spanish *[Go to question J08_1]*

J08_1.

How comfortable are you participating in quality improvement support activities provided in English? (Select one response.)

- ☐ Very comfortable
- ☐ Somewhat comfortable
- ☐ Not very comfortable
- ☐ Not at all comfortable

SECTION K: DUAL LANGUAGE LEARNERS

K01.

Do you have children in your classroom or family child care home whose primary home language is not English?

☐ Yes *[Go to question K02]*
☐ No *[Go to question X01]*

K02.

When caring for children whose primary home language is not English, how often do you use a child's home language for the following activities?

(Select one response for each row.)

	Always	Often	Sometimes	Rarely	Never
During one-to-one interactions with a child	☐	☐	☐	☐	☐
During whole group time	☐	☐	☐	☐	☐
Communicating with child's parents	☐	☐	☐	☐	☐

K03.

Which languages, other than English, do you use with these children?

(Select all that apply.)

☐ Spanish
☐ Cantonese
☐ Mandarin
☐ Tagalog
☐ Vietnamese
☐ Korean
☐ Other (please specify): _____
☐ No language other than English

Section K: Dual Language Learners

X01.
Do you have any other comments about the quality improvement supports you have received or about the QRIS in general that you would like to share with us?

THANK YOU

Thank you very much for completing our survey! We hope you enjoy your $20 Amazon gift card.

We welcome any questions, comments, or suggestions you may have regarding the survey. Please email them to caqrisstudy@rand.org.

Appendix 5B. Staff Survey Response Tables

Staff Sample Demographics

Exhibit 5B.1. Consortia and Majority Classroom Age Group Represented by Survey Respondents, by Facility Type

	Center	FCCH	All
		Percentage	
Consortia			
Alameda	10.0	7.4	9.8
Fresno	5.4	3.7	5.2
Los Angeles Office of Child Care	6.1	37.0	8.8
Los Angeles Universal Preschool (LAUP)	16.5	3.7	15.4
Orange	3.6	0.0	3.3
Sacramento	6.5	33.3	8.8
San Diego	17.6	0.0	16.0
San Francisco	6.8	7.4	6.9
San Joaquin	1.4	0.0	1.3
Santa Clara	8.6	7.4	8.5
Ventura	17.6	0.0	16.0
Majority age group			
Infant	2.9	18.5	4.3
Toddler	14.0	37.0	16.0
Preschool	83.2	44.4	79.7
Number of respondents	279	27	306

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Majority age group represents the age group with the largest number of children within a staff respondent's classroom.

Exhibit 5B.2. Characteristics of Staff Survey Respondents by Staff Type

Measure	Lead	Assistant	All
	Percentage		
Age			
Under 20	0.0	0.0	0.0
20–29	10.6	23.1	15.4
30–39	25.9	20.5	23.9
40–49	30.7	21.4	27.1
50–59	22.2	24.8	23.2
60 or over	10.6	10.3	10.5
[Missing]	*0.0*	*0.0*	*0.0*
Race-ethnicity			
Hispanic or Latino	56.0	81.6	65.9
White alone, non-Hispanic	19.2	0.9	12.2
Black or African American alone, non-Hispanic	6.0	6.1	6.1
Asian alone, non-Hispanic	13.2	8.8	11.5
Other alone, non-Hispanic	2.8	1.8	2.4
Multiracial, non-Hispanic	2.8	0.9	2.0
[Missing]	*3.7*	*2.6*	*3.3*
Highest education level			
Some high school	1.1	7.8	3.7
GED	0.0	4.3	1.7
High school diploma	4.9	9.5	6.6
Some college (no degree)	18.9	36.2	25.6
Associate's degree	22.7	22.4	22.6
Bachelor's degree	37.8	17.2	29.9
Some graduate coursework	8.1	1.7	5.7
Master's degree	6.5	0.9	4.3
Ed.D., Ph.D., J.D., or other higher degree	0.0	0.0	0.0
[Missing]	*2.1*	*0.9*	*1.6*
Teaching experience with children birth to age 5			
Less than 2 years	34.9	49.6	40.5
2 to 5 years	21.7	28.2	24.2
6 to 10 years	14.3	10.3	12.8
11 to 25 years	21.7	7.7	16.3
26 or more years	7.4	4.3	6.2
[Missing]	*0.0*	*0.0*	*0.0*
Current college degree enrollment			
Enrolled in early childhood (EC)-related major	18.7	29.3	22.8
Enrolled in non–ECE-related major	1.1	0.9	1.0
Enrolled, no major decided	1.7	0.0	1.0
Not enrolled	78.6	69.8	75.2
[Missing]	*3.7*	*0.9*	*2.6*
Primary language			
English	57.5	41.4	51.3
Spanish	31.9	52.6	39.8
Another language	10.6	6.0	8.9
[Missing]	*0.5*	*0.9*	*0.7*
Number of respondents	189	117	306

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage distributions are computed for nonmissing cases and may not sum to 100 because of rounding. The percentage of missing cases is shown for each measure for reference.

Exhibit 5B.3. Characteristics of QRIS Staff Survey Respondents and California's Early Care and Education (ECE) Workforce: Centers

	QRIS Survey Lead Staff 2015	QRIS Survey Assistant Staff 2015	California ECE Teachers 2004	California ECE Assistant Teachers 2004
Measure	Percentage			
Age				
29 or under	11.5	21.0	33.0	48.7
30–39	27.0	21.9	29.1	26.7
40–49	32.2	21.0	22.5	15.3
50 or over	29.3	36.2	15.4	9.3
Number of respondents	174	105	42,676	13,404
Race-ethnicity				
Hispanic or Latino	55.6	81.6	26.9	42.0
White, non-Hispanic	20.1	1.0	53.0	36.9
Black	5.3	4.9	7.3	8.1
Asian	16.0	9.7	8.0	8.1
Other	4.7	2.9	4.8	4.9
Number of respondents	169	103	43,290	20,833
Highest education level				
High school diploma or less	4.0	18.1	0.4	12.1
Some college, no degree	16.1	36.2	46.7	68.1
Associate's degree	23.6	24.8	27.8	12.4
Bachelor's degree or higher	56.3	21.0	25.1	7.4
Number of respondents	174	105	43,499	21,213

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey and Whitebook et al. (2006) figures 3.1 and 3.10 and table 3.1.

NOTE: Both samples include center staff only. QRIS lead staff includes lead teachers and coteachers. The percentages for the California ECE workforce comparison come from Whitebook et al. (2006), a study that included a random statewide sample of 1,800 licensed centers in California in 2004. The sample evenly represented four regions of California—Northern California, the Bay Area, Central California, and Southern California—and results were weighted to represent the statewide population of licensed centers. Centers included in the study were licensed to serve infants, toddlers, preschoolers, and school-age children, although authors note that the majority of centers served preschoolers. Whitebook et al. (2006) used a seven-category classification that combined racial and ethnic information: White, Non-Hispanic, Latina, African American, Asian/Pacific Islander, American Indian/Alaskan Native, and Other. The California QRIS Study Staff Survey did not combine Pacific Islanders with Asian. We have collapsed several categories under "Other," including two or more races/multiracial, American Indian/Alaskan Native, and for California QRIS Study Staff Survey, the category also includes Pacific Islanders.

Participation in Quality Improvement Supports

Exhibit 5B.4. Participation in Quality Improvement (QI) Activities: Centers (June 2014–March 2015)

Measure	Lead	Assistant	All
	Percentage		
Received some coaching/mentoring			
Yes	81.6	77.1	79.9
No	18.4	22.9	20.1
Received some noncredit training			
Yes	76.3	66.4	72.6
No	23.7	33.6	27.4
Received some peer support			
Yes	56.7	56.9	56.7
No	43.3	43.1	43.3
Received some credit-bearing courses			
Yes	24.1	31.7	26.9
No	75.9	68.3	73.1
Number of respondents	174	105	279

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentages are calculated based on nonmissing cases for each QI activity. Number of missing responses varies from two to four counts by staff type and QI improvement activity type.

Exhibit 5B.5. Participation in Quality Improvement Activities: FCCH (June 2014–March 2015)

Measure	FCCH Staff
	Percentage
Received some coaching/mentoring	
Yes	85.2
No	14.8
Received some noncredit training	
Yes	85.2
No	14.8
Received some peer support	
Yes	48.2
No	51.9
Received some credit-bearing college or university courses	
Yes	48.2
No	51.9
Number of respondents	27

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Sample includes 15 FCCH lead staff and 12 FCCH assistant staff.

Exhibit 5B.6. Participation in Quality Improvement (QI) Activities: Centers (June 2013–May 2014)

Measure	Lead	Assistant	All
	Percentage		
Coaching/mentoring			
Yes	73.2	62.9	69.5
No	26.8	37.1	30.5
[Missing]	*9.8*	*15.2*	*11.8*
Noncredit courses, seminars, workshops, or training programs			
Yes	78.2	73.1	76.3
No	21.8	26.9	23.7
[Missing]	*10.3*	*11.4*	*10.8*
Formal peer support activities			
Yes	57.6	59.2	58.2
No	42.4	40.8	41.8
[Missing]	*28.2*	*27.6*	*28.0*
Credit-bearing college or university courses			
Yes	28.3	36.8	31.4
No	71.7	63.2	68.6
[Missing]	*4.6*	*9.5*	*6.5*
Financial incentives			
Yes	33.1	30.4	32.1
No	66.9	69.6	67.9
[Missing]	*1.2*	*2.9*	*1.8*
Number of respondents	174	105	279

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported participation level in activity type from June 2013 through May 2014. The percentage of missing cases is shown for each measure for reference. Number of missing responses varies from 2 to 49 counts by staff type and QI type.

Coaching or Mentoring Supports

Exhibit 5B.7. Coaching or Mentoring Hours per Person per Month by Staff Type: Centers (June 2014–March 2015)

Lead Staff (*N*=142)	Mean	Median	SD	Min	Max
Total hours received from June 2014–March 2015	22.9	17.0	20.8	1.0	150.0
June 2014	2.1	1.0	3.2	0.0	16.0
July 2014	1.6	0.0	2.8	0.0	16.0
Aug 2014	2.3	1.0	3.8	0.0	20.0
Sept 2014	3.2	2.0	3.7	0.0	18.0
Oct 2014	2.5	2.0	2.3	0.0	15.0
Nov2014	2.5	2.0	2.6	0.0	15.0
Dec 2014	2.1	2.0	2.3	0.0	15.0
Jan 2015	2.5	2.0	3.0	0.0	20.0
Feb 2015	2.4	2.0	2.8	0.0	20.0
Mar 2015	2.5	2.0	2.6	0.0	16.0
Assistant Staff (*N*=81)	**Mean**	**Median**	**SD**	**Min**	**Max**
Total hours received from June 2014–March 2015	21.0	14.0	23.9	1.0	160.0
June 2014	1.6	0.5	2.2	0.0	11.0
July 2014	1.2	0.0	2.3	0.0	10.0
Aug 2014	1.6	0.0	3.4	0.0	20.0
Sept 2014	2.4	2.0	3.2	0.0	20.0
Oct 2014	2.3	2.0	2.9	0.0	20.0
Nov2014	2.5	2.0	3.1	0.0	20.0
Dec 2014	2.6	2.0	3.3	0.0	20.0
Jan 2015	2.4	2.0	3.2	0.0	20.0
Feb 2015	2.5	2.0	3.2	0.0	20.0
Mar 2015	2.8	2.0	3.3	0.0	20.0
All Staff (*N*=223)	**Mean**	**Median**	**SD**	**Min**	**Max**
Total hours received from June 2014–March 2015	22.2	15.5	21.9	1.0	160.0
June 2014	1.9	1.0	2.9	0.0	16.0
July 2014	1.5	0.0	2.7	0.0	16.0
Aug 2014	2.1	1.0	3.6	0.0	20.0
Sept 2014	2.9	2.0	3.5	0.0	20.0
Oct 2014	2.4	2.0	2.6	0.0	20.0
Nov2014	2.5	2.0	2.8	0.0	20.0
Dec 2014	2.3	2.0	2.7	0.0	20.0
Jan 2015	2.5	2.0	3.1	0.0	20.0
Feb 2015	2.4	2.0	2.9	0.0	20.0
Mar 2015	2.6	2.0	2.9	0.0	20.0

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Summary of each item is calculated based on nonmissing cases for respondents who reported having received some coaching from June 2014 through March 2015. The number of missing responses varies from one to nine counts by month and by staff type. SD=standard deviation.

Exhibit 5B.8. Coaching or Mentoring Frequency per Person per Month by Staff Type: Centers (June 2014–March 2015)

Lead Staff (*N*=142)	Not at All	1 or 2 Times	3 or 4 Times	5 or More Times
		Percentage		
Times received in each month				
June 2014	51.1	34.3	13.1	1.5
July 2014	63.0	28.3	7.3	1.5
Aug 2014	52.2	37.3	9.0	1.5
Sept 2014	24.2	56.8	12.9	6.1
Oct 2014	20.9	59.0	17.2	3.0
Nov2014	26.5	55.2	15.4	2.9
Dec 2014	30.7	54.0	11.7	3.7
Jan 2015	27.8	56.4	13.5	2.3
Feb 2015	28.2	56.3	11.9	3.7
Mar 2015	24.3	58.1	16.2	1.5
Assistant Staff (*N*=81)	**Not at All**	**1 or 2 Times**	**3 or 4 Times**	**5 or More Times**
Times received in each month				
June 2014	54.4	35.4	10.1	0.0
July 2014	71.6	25.9	2.5	0.0
Aug 2014	55.0	40.0	5.0	0.0
Sept 2014	32.9	53.2	8.9	5.1
Oct 2014	27.3	62.3	7.8	2.6
Nov2014	31.6	57.9	7.9	2.6
Dec 2014	26.7	64.0	6.7	2.7
Jan 2015	30.3	59.2	6.6	4.0
Feb 2015	26.7	62.7	8.0	2.7
Mar 2015	18.7	66.7	12.0	2.7
All Staff (*N*=81)	**Not at All**	**1 or 2 Times**	**3 or 4 Times**	**5 or More Times**
Times received in each month				
June 2014	52.3	34.7	12.0	0.9
July 2014	66.2	27.4	5.5	0.9
Aug 2014	53.3	38.3	7.5	0.9
Sept 2014	27.5	55.5	11.4	5.7
Oct 2014	23.2	60.2	13.7	2.8
Nov2014	28.3	56.1	12.7	2.8
Dec 2014	29.3	57.6	9.9	3.3
Jan 2015	28.7	57.4	11.0	2.9
Feb 2015	27.6	58.6	10.5	3.3
Mar 2015	22.3	61.1	14.7	1.9

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some coaching between June 2014 and March 2015. Number of missing responses varies from one to six counts by month and by staff type.

Exhibit 5B.9. Consistent Participation in Coaching or Mentoring by Staff Type: Centers (September 2014–March 2015)

Measure	Lead	Assistant	All
		Percentage	
Received coaching every month from Sept 2014 to March 2015	50.4	48.0	49.5
Number of respondents	135	75	210

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on respondents who reported having received some coaching or mentoring from June 2014 to March 2015 and for whom we had sufficient information across the months of September 2014 to March 2015 to make a determination of consistent participation.

Exhibit 5B.10. Coaching or Mentoring Intensity of Top Three Most Reported Content Areas by Staff Type: Centers (June 2014–March 2015)

Lead Staff (*N*=142)	**No Time**	**25% or Less**	**25% to 50%**	**50% to 75%**	**75% or More**
			Percentage		
Social and emotional development	2.1	17.9	31.4	31.4	17.1
Language development/literacy	4.3	22.1	35.0	30.7	7.9
Math/cognitive development	8.2	40.0	31.1	15.6	5.2
Assistant Staff (*N*=81)	**No Time**	**25% or Less**	**25% to 50%**	**50% to 75%**	**75% or More**
Social and emotional development	1.3	17.7	38.0	29.1	13.9
Language development/literacy	2.5	22.5	43.8	23.8	7.5
Math/cognitive development	2.6	37.2	39.7	19.2	1.3
All Staff (*N*=223)	**No Time**	**25% or Less**	**25% to 50%**	**50% to 75%**	**75% or More**
Social and emotional development	1.8	17.8	33.8	30.6	16.0
Language development/literacy	3.6	22.3	38.2	28.2	7.7
Math/cognitive development	6.1	39.0	34.3	16.9	3.8

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some coaching or mentoring from June 2014 through March 2015. Number of missing responses varies from one to seven counts by content area and by staff type.

Exhibit 5B.11. Coaching or Mentoring Content Areas from Most Reported to Least Reported by Staff Type: Centers (June 2014–March 2015)

Content Area	Lead	Assistant	All
	Percentage		
Social and emotional development	97.9	98.8	98.2
Language development/literacy	95.8	97.5	96.4
Math/cognitive development	92.3	97.5	94.2
Teacher-child interactions	83.1	77.8	81.2
Understanding/improve scores on CLASS	83.8	65.4	77.1
Materials and learning environment	78.9	71.6	76.2
Child behavior management	76.8	71.6	74.9
Child assessment and developmental screening	74.7	72.8	74.0
Understand/improve scores on ECERS/FCCERS/ITERS	78.2	63.0	72.7
Classroom management	73.2	63.0	69.5
Health and safety	63.4	71.6	66.4
California Preschool Learning Foundations and Frameworks	62.0	63.0	62.3
English language development	59.9	60.5	60.1
Subjects other than language or math	55.6	66.7	59.6
Family engagement	57.0	58.0	57.4
Physical development and health	56.3	50.6	54.3
Cultural/language diversity	54.2	53.1	53.8
Special needs or inclusion	43.7	48.2	45.3
A specific curriculum	45.1	40.7	43.5
Relationship-based practices with infants and toddlers	29.6	29.6	29.6
Licensing issues	25.4	29.6	26.9
Accreditation	17.6	19.8	18.4
Business practices, program management, and/or fiscal management	13.4	13.6	13.5
Other	4.9	3.8	4.5
Number of respondents	142	81	223

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some coaching or mentoring between June 2014 and March 2015. Number of missing responses varies from one to seven counts by content area and by staff type. The content areas are ordered from highest to lowest by total percentage reported. Respondents could select more than one content area.

Exhibit 5B.12. Locations and Requirements for Coaching or Mentoring by Staff Type: Centers (June 2014–March 2015)

	Lead	Assistant	All
		Percentage	
Received coaching support			
In person at my center	88.6	92.5	90.0
Online/e-mail/video	42.9	28.8	37.7
In-person, off-site, away from my center	40.0	31.3	36.8
By phone	9.3	5.0	7.7
By regular mail	7.1	5.0	6.4
Type of incentive/requirement to participate in coaching			
Required by my center	50.7	47.5	49.6
Wanted to participate for my own self improvement	40.7	38.8	40.0
Received financial stipend	28.6	27.5	28.2
Received free classroom materials	28.6	25	27.3
No incentives	25.7	21.3	24.1
Required for other reason	9.3	8.8	9.1
Received priority enrollment	1.4	3.8	2.3
Number of respondents	142	81	223

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some coaching or mentoring between June 2014 and March 2015. Number of missing responses varies from one to two counts by item and by staff type. Respondents could select more than one response option within each section.

Exhibit 5B.13. Programs Reported as Coaching or Mentoring Providers by Staff Type: Centers (June 2014–March 2015)

Program	Lead	Assistant	All
		Percentage	
AB212 or CARES Plus program	27.8	25.3	26.9
Center on the Social and Emotional Foundations for Early Learning (CSEFEL)	28.6	21.3	26.0
Head Start coaches	21.8	32.0	25.5
Quality Preschool Initiative (QPI) coaching	19.6	13.3	17.3
California Preschool Instructional Network (CPIN) coaches and on-site training and technical assistance	18.8	10.7	15.9
My Teaching Partner	14.3	13.3	13.9
Partners for Quality (PITC)	14.3	9.3	12.5
California Early Childhood Mentor Program	15.0	5.3	11.5
Child Signature Program (CSP)	13.5	8.0	11.5
Race to the Top coaches or early education specialists	7.5	9.3	8.2
QRIS technical assistance specialists (TAS)	7.5	4.0	6.3
Preschool Bridging Model (PBM) early care and education specialist	6.8	2.7	5.3
Quality Counts generalist coaches	4.5	6.7	5.3
Race to the Top coaches	7.5	1.3	5.3
Preschool for All (PFA)	6.0	2.7	4.8
California Inclusion and Behavior Consultation Network	4.5	2.7	3.9
Preschool for All/Pathways to Quality	4.5	2.7	3.9
Coaching Collaborative	3.8	2.7	3.4
Early Education coaching	3.0	1.3	2.4
Early Stars coaches	1.5	4.0	2.4
Video Coaching Program	3.0	1.3	2.4
Gateways	0.8	4.0	1.9
Quality Child Care Collaborative	1.5	2.7	1.9
WestEd Pyramid/All Aboard!/Pyramid Model (CSEFEL)	2.3	1.3	1.9
QRIS/local Consortia/Race to the Top	0.8	4.0	1.9
Race to the Top advisors/Raising Quality! coaching	0.0	1.3	0.5
San Francisco Department of Public Health	0.8	0.0	0.5
San Francisco Quality Connections	0.8	0.0	0.5
Don't know/uncertain	15.0	25.3	18.8
Other	2.3	2.7	2.4
Number of respondents	142	81	223

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some coaching or mentoring from June 2014 through March 2015. Number of missing responses varies from six to nine counts by staff type. Respondents could select more than one program. AB212 or CARES Plus program includes county-specific programs such as ASPIRE advisor, PIECES advisor, and so on.

Exhibit 5B.14. Coaching or Mentoring Hours per Person per Month: FCCHs (June 2014–March 2015)

FCCH Staff	Mean	Median	SD	Min	Max
Total hours received from June 2014–Mar 2015	52.5	46.0	45.8	4.0	164.0
June 2014	4.4	2.0	5.4	0.0	20.0
July 2014	4.5	2.0	5.2	0.0	20.0
Aug 2014	4.7	2.0	5.1	0.0	17.0
Sept 2014	4.8	3.5	4.7	0.0	15.0
Oct 2014	7.2	6.0	7.5	0.0	30.0
Nov2014	6.2	4.0	6.6	0.0	25.0
Dec 2014	6.1	4.0	7.0	0.0	27.0
Jan 2015	5.8	4.0	6.1	0.0	21.0
Feb 2015	6.6	4.0	7.5	0.0	30.0
Mar 2015	6.7	4.0	7.6	1.0	30.0
Number of respondents			23		

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Summary of each item is calculated based on nonmissing cases for 15 FCCH lead staff and eight FCCH assistant staff respondents who reported having received some coaching or mentoring from June 2014 through March 2015. Number of missing responses varies from one to three counts by month. SD=standard deviation.

Exhibit 5B.15. Coaching or Mentoring Frequency per Person per Month: FCCHs (June 2014–March 2015)

FCCH Staff	Not at All	1 or 2 Times	3 or 4 Times	5 or More Times
		Percentage		
Times received each month				
June 2014	22.7	63.6	9.1	4.6
July 2014	33.3	52.4	14.3	0.0
Aug 2014	27.3	59.1	13.6	0.0
Sept 2014	18.2	63.6	13.6	4.6
Oct 2014	13.0	60.9	13.0	13.0
Nov 2014	17.4	52.2	17.4	13.0
Dec 2014	26.1	47.8	13.0	13.0
Jan 2015	17.4	52.2	13.0	17.4
Feb 2015	17.4	56.5	13.0	13.0
Mar 2015	8.7	56.5	21.7	13.0
Number of respondents			23	

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Percentage of each item is calculated based on nonmissing cases for 15 FCCH lead staff and eight FCCH assistant staff respondents who reported having received some coaching or mentoring from June 2014 through March 2015. Number of missing responses varies from one to two counts by month.

Exhibit 5B.16. Consistent Participation in Coaching or Mentoring: FCCHs (September 2014–March 2015)

Measure	FCCH staff
	Percentage
Received coaching every month from Sept 2014 to March 2015	71.4
Number of respondents	21

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on respondents who reported having received some coaching or mentoring from June 2014 through March 2015 and for whom we had sufficient information across the months of September 2014 to March 2015 to make a determination of consistent participation.

Exhibit 5B.17. Coaching or Mentoring Content Areas From Most Reported to Least Reported: FCCHs (June 2014–March 2015)

	FCCH Staff
Content Area	Percentage
Language development/literacy	100.0
Social and emotional development	100.0
Math/cognitive development	95.7
Materials and learning environment	82.6
Teacher-child interactions	82.6
Child assessment and developmental screening	78.3
Physical development and health	69.6
Classroom management	69.6
Understand/improve scores on ECERS/FCCERS/ITERS	69.6
Understanding/improve scores on CLASS	69.6
Subjects other than language and mathematics	65.2
Child behavior management	65.2
Health and safety	60.9
A specific curriculum	56.5
Cultural/language diversity	56.5
California Preschool Learning Foundations and Frameworks	52.2
Family engagement	52.2
Relationship-based practices with infants and toddlers	47.8
Business practices, program management, and/or fiscal management	43.5
English language development	39.1
Special needs or inclusion	39.1
Licensing issues	26.1
Accreditation	21.7
Other	8.7
Number of respondents	23

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Percentage of each item is calculated based on nonmissing cases for 15 FCCH lead staff and eight FCCH assistant staff respondents who reported having received some coaching or mentoring from June 2014 through March 2015. Respondents could select more than one content area.

Exhibit 5B.18. Locations and Requirements for Coaching or Mentoring: FCCHs (June 2014–March 2015)

	FCCH Staff
	Percentage
Received coaching support	
In person at my FCCH	95.7
Online/e-mail/video	43.5
In-person, off-site, away from FCCH	43.5
By phone	47.8
By regular mail	21.7
Type of incentive/requirement to participate in coaching	
Required by my FCCH	21.7
Wanted to participate for my own self improvement	78.3
Received financial stipend	21.7
Received free classroom materials	47.8
No incentives	21.7
Required for other reason	8.7
Received priority enrollment	8.7
Number of respondents	23

SOURCE: Authors' analysis of the 2014-15 California QRIS Study Staff Survey.

NOTE: Percentage of each item is calculated based on respondents who reported having received some coaching or mentoring from June 2014 through March 2015. The list is ordered to match center staff ordering in appendix exhibit 5B.12. Respondents could select more than one response option within each section.

Exhibit 5B.19. Programs Reported as Coaching or Mentoring Providers: FCCHs (June 2014–March 2015)

Program	FCCH Staff
	Percentage
AB212 or CARES Plus program	45.5
Center on the Social and Emotional Foundations for Early Learning (CSEFEL)	18.2
Head Start coaches	13.6
Quality Preschool Initiative (QPI coaching	0.0
California Preschool Instructional Network (CPIN) coaches and on-site training and technical assistance	0.0
My Teaching Partner	36.4
Partners for Quality (PITC)	22.7
California Early Childhood Mentor Program	13.6
Child Signature Program (CSP)	9.1
Race to the Top coaches or early education specialists	0.0
QRIS technical assistance specialists (TAS)	0.0
Preschool Bridging Model (PBM) early care and education specialist	31.8
Quality Counts generalist coaches	9.1
Race to the Top coaches	31.8
Preschool for All (PFA)	4.6
California Inclusion and Behavior Consultation Network	9.1
PFA/Pathways to Quality	0.0
Coaching Collaborative	4.6
Early Education coaching	0.0
Early Stars coaches	4.6
Video Coaching Program	0.0
Gateways	22.7
Quality Child Care Collaborative	18.2
WestEd Pyramid/All Aboard!/Pyramid Model (CSEFEL)	0.0
QRIS/local Consortia/Race to the Top	4.6
Race to the Top advisors/Raising Quality! coaching	0.0
San Francisco Department of Public Health	0.0
San Francisco Quality Connections	0.0
Don't know/uncertain	9.1
Other	0.0
Number of respondents	23

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some coaching or mentoring from June 2014 through March 2015. Number of missing responses is one. Respondents could select more than one program. AB212 or CARES Plus program includes county-specific programs such as ASPIRE advisor, PIECES advisor, and so on. The list is ordered to match center staff ordering in appendix exhibit 5B.13.

Noncredit Workshops or Training

Exhibit 5B.20. Noncredit Workshops or Training Hours per Person per Month by Staff Type: Centers (June 2014–March 2015)

Lead Staff (*N*=132)	Mean	Median	SD	Min	Max
Total hours received from June 2014 to March 2015	27.8	23.0	27.5	2.0	255.0
June 2014	2.4	0.0	5.4	0.0	40.0
July 2014	2.1	0.0	4.2	0.0	24.0
Aug 2014	4.0	2.0	7.3	0.0	60.0
Sept 2014	3.9	2.0	6.8	0.0	50.0
Oct 2014	3.1	2.0	5.2	0.0	50.0
Nov 2014	3.0	2.0	4.6	0.0	40.0
Dec 2014	2.1	1.0	3.2	0.0	25.0
Jan 2015	2.8	2.0	3.5	0.0	25.0
Feb 2015	3.0	2.0	3.0	0.0	15.0
Mar 2015	3.3	2.0	3.8	0.0	20.0
Assistant Staff (*N*=69)	**Mean**	**Median**	**SD**	**Min**	**Max**
Total hours received from June 2014 to March 2015	28.0	21.0	25.3	1.0	142.0
June 2014	2.3	0.0	4.2	0.0	24.0
July 2014	1.9	0.0	3.5	0.0	16.0
Aug 2014	2.7	0.0	5.2	0.0	24.0
Sept 2014	4.4	2.0	6.3	0.0	30.0
Oct 2014	2.5	2.0	2.7	0.0	9.0
Nov 2014	2.9	2.0	3.6	0.0	20.0
Dec 2014	3.5	2.0	5.5	0.0	36.0
Jan 2015	3.6	2.0	5.5	0.0	36.0
Feb 2015	3.2	2.0	3.8	0.0	20.0
Mar 2015	3.4	2.8	4.0	0.0	20.0
All Staff (*N*=201)	**Mean**	**Median**	**SD**	**Min**	**Max**
Total hours received from June 2014 to March 2015	27.9	22.0	26.7	1.0	255.0
June 2014	2.4	0.0	5.0	0.0	40.0
July 2014	2.0	0.0	4.0	0.0	24.0
Aug 2014	3.6	1.0	6.7	0.0	60.0
Sept 2014	4.1	2.0	6.6	0.0	50.0
Oct 2014	2.9	2.0	4.5	0.0	50.0
Nov2014	3.0	2.0	4.3	0.0	40.0
Dec 2014	2.6	1.0	4.2	0.0	36.0
Jan 2015	3.1	2.0	4.3	0.0	36.0
Feb 2015	3.0	2.0	3.3	0.0	20.0
Mar 2015	3.3	2.0	3.9	0.0	20.0

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Summary of each item is calculated based on nonmissing cases for respondents who reported having received some noncredit training from June 2014 through March 2015. Number of missing responses varies from 2 to 26 counts by month and by staff type. One observation was deleted from total hours received between June 2014 and March 2015 because the respondent either responded having received no noncredit training or the response was missing for all months. SD=standard deviation.

Exhibit 5B.21. Consistent Participation in Noncredit Workshops or Training by Staff Type: Centers (September 2014–March 2015)

Measure	Lead	Assistant	All
		Percentage	
Received noncredit training every month from Sept 2014 to March 2015	33.6	37.3	34.8
Number of respondents	119	59	178

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on respondents who reported having received some noncredit training from June 2014 through March 2015 and for whom we had sufficient information across the months of September 2014 to March 2015 to make a determination of consistent participation.

Exhibit 5B.22. Noncredit Workshops or Training Intensity of Top 3 Most Reported Content Areas by Staff Type: Centers (June 2014–March 2015)

Lead Staff (*N*=132)	**No Time**	**25% or Less**	**25% to 50%**	**50% to 75%**	**75% or More**
			Percentage		
Social and emotional development	2.3	15.5	34.1	24.8	23.3
Language development/literacy	4.0	23.2	35.2	25.6	12.0
Math/cognitive development	6.6	35.5	35.5	16.5	5.8
Assistant Staff (*N*=69)	**No Time**	**25% or Less**	**25% to 50%**	**50% to 75%**	**75% or More**
Social and emotional development	3.0	11.9	35.8	34.3	14.9
Language development/literacy	0.0	23.9	40.3	23.9	11.9
Math/cognitive development	4.8	25.8	38.7	25.8	4.8
All Staff (*N*=201)	**No Time**	**25% or Less**	**25% to 50%**	**50% to 75%**	**75% or More**
Social and emotional development	2.6	14.3	34.7	28.1	20.4
Language development/literacy	2.6	23.4	37.0	25.0	12.0
Math/cognitive development	6.0	32.2	36.6	19.7	5.5

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some noncredit training from June 2014 through March 2015. Number of missing responses varies from 2 to 18 counts by content area and by staff type.

Exhibit 5B.23. Noncredit Workshops or Training Content Areas From Most Reported to Least Reported by Staff Type: Centers (June 2014–March 2015)

Content Area	Lead	Assistant	All
		Percentage	
Social and emotional development	97.7	97.0	97.5
Language development/literacy	96.0	100.0	97.4
Math/cognitive development	93.4	95.2	94.0
Child assessment and developmental screening	73.0	68.7	71.5
Teacher-child interactions	69.1	67.2	68.4
Child behavior management	64.3	67.2	65.3
Materials and learning environment	61.9	62.7	62.2
Understand/improve scores on CLASS	60.3	59.7	60.1
Health and safety	58.7	61.2	59.6
Understand/improve scores on ECERS/FCCERS	55.6	61.2	57.5
Classroom management	61.1	47.8	56.5
Physical development and health	51.6	56.7	53.4
California Preschool Learning Foundation	54.8	50.8	53.4
Subjects other than language or math	52.4	53.7	52.9
English language development	46.8	50.8	48.2
Family engagement	46.8	44.8	46.1
Special needs or inclusion	46.0	38.8	43.5
Cultural/language diversity	43.7	43.3	43.5
A specific curriculum	34.9	40.3	36.8
Relationship-based practices with infants and toddlers	27.8	32.8	29.5
Licensing issues	22.2	14.9	19.7
Accreditation	11.9	13.4	12.4
Business practices, program management, and/or fiscal management	8.7	9.0	8.8
Other	3.2	0.0	2.1
Number of respondents	132	69	201

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some noncredit training from June 2014 through March 2015. Number of missing responses varies from 2 to 18 counts by content area and by staff type. The content areas are ordered from highest to lowest by total percentage reported. Respondents could select more than one content area.

Exhibit 5B.24. Locations and Requirements for Noncredit Workshops or Training by Staff Type: Centers (June 2014–March 2015)

	Lead	Assistant	All
		Percentage	
Received coaching support			
In-person, off-site, away from my center	73.9	63.6	70.4
In person at my center	71.2	64.6	66.8
Online/e-mail/video	32.3	22.7	29.1
Other	1.5	0.0	1.0
Type of incentive/requirement to participate in coaching			
Wanted to participate for my own self improvement	49.6	45.5	48.2
Required by my center	51.9	39.4	47.7
Provided to me for free	44.2	31.8	40.0
Received financial stipend	30.2	25.8	28.7
Received free classroom materials	17.8	24.2	20.0
No incentives	18.6	21.2	19.5
Required for other reason	9.3	7.6	8.7
Received priority enrollment	6.2	6.1	6.2
Other	0.0	0.0	0.0
Number of respondents	132	69	201

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some noncredit training from June 2014 through March 2015. Number of missing responses varies from three to six counts by item and by staff type. Respondents could select more than one response option within each section.

Exhibit 5B.25. Programs Reported as Noncredit Workshops or Training Providers by Staff Type: Centers (June 2014–March 2015)

Program	Lead	Assistant	All
		Percentage	
AB212 or CARES Plus program	35.8	36.7	36.1
Desired Results Field Training (DRDP)	31.7	30.0	31.2
Center on the Social and Emotional Foundations for Early Learning (CSEFEL)/Teaching Pyramid	33.3	25.0	30.6
California Preschool Instructional Network (CPIN)	29.3	13.3	24.0
English language learners support	19.5	11.7	16.9
Quality Preschool Initiative (QPI) workshops	18.7	13.3	16.9
The Program for Infant/Toddler Care	10.6	5.0	8.7
Help Me Grow	8.1	5.0	7.1
Family Child Care at Its Best	4.9	6.7	5.5
Child Care Initiative Project (CCIP)	2.4	5.0	3.3
WestEd Pyramid/All Aboard!/Pyramid Model (CSEFEL)	4.1	1.7	3.3
Gateways/Resource & referral training workshops	2.4	3.3	2.7
Quality Child Care Collaborative	2.4	3.3	2.7
Services for Early Education and Development (SEED)	3.3	0.0	2.2
YMCA Child Care Initiative	1.6	1.7	1.6
First 5 San Joaquin Quality Improvement	0.8	1.7	1.1
Fresno Accreditation Institute (FAI)	1.6	0.0	1.1
Beanstalk	0.8	0.0	0.6
Pacific Oaks Leadership Institute	0.8	0.0	0.6
Project Inspire Target Corporation Grant	0.8	0.0	0.6
Don't know/uncertain	23.6	20.0	22.4
Other	7.3	10.0	8.2
Number of respondents	132	69	201

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some noncredit training from June 2014 through March 2015. Number of missing responses varies from 9 to 18 counts by staff type. Respondents could select more than one program. AB212 or CARES Plus program includes county-specific programs such as ASPIRE, PIECES, and so on.

Exhibit 5B.26. Noncredit Workshops or Training Hours per Person per Month: FCCHs (June 2014–March 2015)

FCCH Staff (*N*=23)	Mean	Median	SD	Min	Max
Total hours received from June 2014 to March 2015	34.3	31.0	30.7	4.0	140.0
June 2014	2.4	1.0	3.3	0.0	12.0
July 2014	2.3	0.0	3.6	0.0	11.5
Aug 2014	1.8	0.0	2.7	0.0	8.0
Sept 2014	1.8	0.0	2.6	0.0	8.0
Oct 2014	4.3	4.0	4.7	0.0	20.0
Nov 2014	4.3	3.0	4.5	0.0	20.0
Dec 2014	3.6	2.0	5.0	0.0	20.0
Jan 2015	4.7	4.0	4.9	0.0	20.0
Feb 2015	5.2	3.0	6.7	0.0	30.0
Mar 2015	5.2	3.0	6.6	0.0	30.0

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Summary of each item is calculated based on nonmissing cases for respondents who reported having received some noncredit training from June 2014 through March 2015. Number of missing responses varies from one to two counts by month. SD=standard deviation.

Exhibit 5B.27. Consistent Participation in Noncredit Workshops or Training: FCCHs (September 2014–March 2015)

Measure	FCCH Staff
	Percentage
Received noncredit training every month from Sept 2014 to March 2015	33.3
Number of respondents	21

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on respondents who reported having received some noncredit training from June 2014 through March 2015 and for whom we had sufficient information across the months of September 2014 to March 2015 to make a determination of consistent participation.

Exhibit 5B.28. Noncredit Workshops or Training Intensity of Top 3 Most Reported Content Areas: FCCHs (June 2014–March 2015)

FCCH Staff (*N*=23)	No Time	25% or Less	25% to 50%	50% to 75%	75% or More
			Percentage		
Social and emotional development	8.7	21.7	34.8	26.1	8.7
Language development/literacy	13.0	17.4	52.2	8.7	8.7
Math/cognitive development	18.2	22.7	40.9	13.6	4.6

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some noncredit training from June 2014 through March 2015. Number of missing responses varies from one to two counts by content area.

Exhibit 5B.29. Noncredit Workshops or Training Content Areas From Most Reported to Least Reported: FCCHs (June 2014–March 2015)

Content Area	FCCH Staff
	Percentage
Social and emotional development	91.3
Language development/literacy	87.0
Math/cognitive development	81.8
Child assessment and developmental screening	69.6
Materials and learning environment	65.2
Teacher-child interactions	65.2
Subjects other than language or math	60.9
Physical development and health	60.9
Child behavior management	60.9
Cultural/language diversity	52.2
Understand/improve scores on ECERS/FCCERS	52.2
Health and safety	52.2
English language development	47.8
Relationship-based practices with infants and toddlers	47.8
Classroom management	47.8
California Preschool Learning Foundation	43.5
Understand/improve scores on CLASS	43.5
Special needs or inclusion	39.1
Family engagement	39.1
Business practices, program management, and/or fiscal management	39.1
A specific curriculum	34.8
Licensing issues	26.1
Accreditation	21.7
Other	0.0
Number of respondents	23

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some noncredit training from June 2014 through March 2015. Number of missing responses varies from zero to one count by content area. The content areas are ordered from highest to lowest by total percentage reported. Respondents could select more than one content area.

Exhibit 5B.30. Locations and Requirements for Noncredit Workshops or Training: FCCHs (June 2014–March 2015)

	FCCH Staff
	Percentage
Received noncredit training support	
In-person, off-site, away from my FCCH	73.9
In person at my FCCH	56.5
Online/e-mail/video	26.1
Other	4.4
Type of incentive/requirement to participate in noncredit training	
Wanted to participate for my own self-improvement	69.6
Required by my FCCH	17.4
Provided to me for free	52.2
Received financial stipend	8.7
Received free classroom materials	34.8
No incentives	13.0
Required for other reason	8.7
Received priority enrollment	8.7
Other	0.0
Number of respondents	23

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on respondents who reported having received some noncredit training from June 2014 through March 2015. Respondents could select more than one response option within each section.

Exhibit 5B.31. Programs Reported as Noncredit Workshops or Training Providers: FCCHs (June 2014–March 2015)

Program	FCCH Staff
	Percentage
Desired Results Field Training (DRDP)	31.8
The Program for Infant/Toddler Care	31.8
Center on the Social and Emotional Foundations for Early Learning (CSEFEL)/Teaching Pyramid	27.3
AB212 or CARES Plus program	27.3
Gateways/Resource & referral training workshops	22.7
Quality Child Care Collaborative	22.7
Family Child Care at Its Best	18.2
California Preschool Instructional Network	13.6
English language learners support	13.6
Child Care Initiative Project (CCIP)	9.1
Beanstalk	4.6
Help Me Grow	4.6
Pacific Oaks Leadership Institute	4.6
First 5 San Joaquin Quality Improvement	0.0
Fresno Accreditation Institute (FAI)	0.0
Project Inspire Target Corporation Grant	0.0
Quality Preschool Initiative (QPI) workshops	0.0
Services for Early Education and Development	0.0
WestEd Pyramid/All Aboard!/Pyramid Model (CSEFEL)	0.0
YMCA Child Care Initiative	0.0
Don't know/uncertain	18.2
Other	9.1
Number of respondents	23

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some noncredit training from June 2014 through March 2015. Respondents could select more than one program. Number of missing responses is one. AB212 or CARES Plus program includes county-specific programs such as ASPIRE, PIECES, and so on.

Peer Support

Exhibit 5B.32. Formal Peer Support Hours per Person per Month by Staff Type: Centers (June 2014–March 2015)

Lead Staff (*N*=98)	Mean	Median	SD	Min	Max
Total hours received from June 2014 to March 2015	21.4	15.0	19.6	1.0	96.0
June 2014	2.0	0.0	4.8	0.0	35.0
July 2014	1.6	0.0	3.6	0.0	24.0
Aug 2014	2.2	1.0	3.1	0.0	12.0
Sept 2014	2.9	2.0	4.8	0.0	40.0
Oct 2014	2.2	2.0	2.5	0.0	12.0
Nov 2014	2.3	2.0	2.5	0.0	12.0
Dec 2014	2.0	1.0	2.4	0.0	12.0
Jan 2015	2.2	2.0	2.5	0.0	12.0
Feb 2015	2.2	2.0	2.4	0.0	12.0
Mar 2015	2.5	2.0	2.4	0.0	12.0
Assistant Staff (*N*=58)	**Mean**	**Median**	**SD**	**Min**	**Max**
Total hours received from June 2014 to March 2015	25.2	16.0	36.4	1.0	241.0
June 2014	1.5	0.0	2.3	0.0	10.0
July 2014	1.2	0.0	2.1	0.0	10.0
Aug 2014	2.0	1.0	3.0	0.0	16.0
Sept 2014	2.8	2.0	4.4	0.0	29.0
Oct 2014	2.6	1.0	5.7	0.0	40.0
Nov 2014	3.0	1.0	5.8	0.0	40.0
Dec 2014	3.3	2.0	5.9	0.0	34.0
Jan 2015	2.9	1.5	5.1	0.0	34.0
Feb 2015	2.9	1.0	4.9	0.0	30.0
Mar 2015	3.3	2.0	5.3	0.0	34.0
All Staff (*N*=156)	**Mean**	**Median**	**SD**	**Min**	**Max**
Total hours received from June 2014 to March 2015	22.8	15.0	26.8	1.0	241.0
June 2014	1.8	0.0	4.0	0.0	35.0
July 2014	1.5	0.0	3.1	0.0	24.0
Aug 2014	2.1	1.0	3.0	0.0	16.0
Sept 2014	2.8	2.0	4.6	0.0	40.0
Oct 2014	2.3	2.0	3.9	0.0	40.0
Nov 2014	2.6	2.0	4.0	0.0	40.0
Dec 2014	2.5	1.5	4.1	0.0	34.0
Jan 2015	2.5	2.0	3.7	0.0	34.0
Feb 2015	2.5	2.0	3.5	0.0	30.0
Mar 2015	2.8	2.0	3.7	0.0	34.0

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Summary of each item is calculated based on nonmissing cases for respondents who reported having received some formal peer support from June 2014 through March 2015. Number of missing responses varies from 1 to 10 counts by month and by staff type. SD=standard deviation.

Exhibit 5B.33. Formal Peer Support Frequency per Person per Month by Staff Type: Centers (June 2014–March 2015)

Lead Staff (*N*=98)	Not at All	1 or 2 Times	3 or 4 Times	5 or More Times
		Percentage		
Times received each month				
June 2014	57.7	28.2	10.6	3.5
July 2014	64.7	25.9	8.2	1.2
Aug 2014	43.4	41.0	13.3	2.4
Sept 2014	24.7	55.3	14.1	5.9
Oct 2014	23.3	61.6	10.5	4.7
Nov 2014	24.7	61.2	10.6	3.5
Dec 2014	27.6	56.3	13.8	2.3
Jan 2015	27.4	57.1	11.9	3.6
Feb 2015	26.2	60.7	9.5	3.6
Mar 2015	18.1	65.1	14.5	2.4
Assistant Staff (*N*=58)	**Not at All**	**1 or 2 Times**	**3 or 4 Times**	**5 or More Times**
Times received each month				
June 2014	55.8	30.8	13.5	0.0
July 2014	63.5	26.9	9.6	0.0
Aug 2014	49.1	37.7	13.2	0.0
Sept 2014	27.5	52.9	15.7	3.9
Oct 2014	36.7	49.0	10.2	4.1
Nov 2014	33.3	52.1	10.4	4.2
Dec 2014	31.9	53.2	8.5	6.4
Jan 2015	36.2	46.8	10.6	6.4
Feb 2015	39.1	43.5	10.9	6.5
Mar 2015	31.1	55.6	8.9	4.4
All Staff (*N*=156)	**Not at All**	**1 or 2 Times**	**3 or 4 Times**	**5 or More Times**
Times received each month				
June 2014	56.9	29.2	11.7	2.2
July 2014	64.2	26.3	8.8	0.7
Aug 2014	45.6	39.7	13.2	1.5
Sept 2014	25.7	54.4	14.7	5.2
Oct 2014	28.2	57.0	10.4	4.4
Nov 2014	27.8	57.9	10.5	3.8
Dec 2014	29.1	55.2	11.9	3.7
Jan 2015	30.5	53.4	11.5	4.6
Feb 2015	30.8	54.6	10.0	4.6
Mar 2015	22.7	61.7	12.5	3.1

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some formal peer support from June 2014 through March 2015. Number of missing responses varies from 2 to 28 counts by month and by staff type.

Exhibit 5B.34. Consistent Participation in Formal Peer Support by Staff Type: Centers (September 2014–March 2015)

Measure	Lead	Assistant	All
		Percentage	
Received formal peer support every month from Sept 2014 to March 2015	43.5	47.2	44.8
Number of respondents	92	53	145

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on respondents who reported having received some formal peer support from June 2014 through March 2015 and for whom we had sufficient information across the months of September 2014 to March 2015 to make a determination of consistent participation.

Exhibit 5B.35. Formal Peer Support Intensity of Top 3 Most Reported Content Areas by Staff Type: Centers (June 2014–March 2015)

Lead Staff (*N*=98)	**No Time**	**25% or Less**	**25% to 50%**	**50% to 75%**	**75% or More**
			Percentage		
Social and emotional development	4.2	22.1	41.1	24.2	8.4
Language development/literacy	7.3	29.2	36.5	18.8	8.3
Math/cognitive development	9.7	33.3	37.6	15.1	4.3
Assistant Staff (*N*=58)	**No Time**	**25% or Less**	**25% to 50%**	**50% to 75%**	**75% or More**
Social and emotional development	1.8	18.2	30.9	30.9	18.2
Language development/literacy	1.9	22.6	37.7	30.2	7.6
Math/cognitive development	2.0	26.0	36.0	32.0	4.0
All Staff (*N*=156)	**No Time**	**25% or Less**	**25% to 50%**	**50% to 75%**	**75% or More**
Social and emotional development	3.3	20.7	37.3	26.7	12.0
Language development/literacy	5.4	26.9	36.9	22.8	8.1
Math/cognitive development	7.0	30.8	37.1	21.0	4.2

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some formal peer support from June 2014 through March 2015. Number of missing responses varies from 2 to 13 counts by content area and by staff type.

Exhibit 5B.36. Formal Peer Support Content Areas From Most Reported to Least Reported by Staff Type: Centers (June 2014–March 2015)

Content Area	Lead	Assistant	All
		Percentage	
Social and emotional development	95.8	98.2	96.7
Language development/literacy	92.7	98.1	94.6
Math/cognitive development	90.3	98.0	93.0
Child assessment and developmental screening	69.2	69.6	69.3
Teacher-child interactions	67.0	66.1	66.7
Child behavior management	61.7	62.5	62.0
Materials and learning environment	66.0	53.6	61.3
Understand/improve scores on CLASS	62.8	51.8	58.7
Health and safety	58.5	58.9	58.7
Classroom management	56.4	53.6	55.3
Understand/improve scores on ECERS/FCCERS/ITER	56.4	53.6	55.3
Subjects other than language/math	46.8	64.3	53.3
Physical development and health	47.9	60.7	52.7
Family engagement	51.1	48.2	50.0
English language development	46.8	48.2	47.3
Cultural/language diversity	42.6	48.2	44.7
Special needs or inclusion	44.7	42.9	44.0
A specific curriculum	42.6	44.6	43.3
California Preschool Learning Foundations and Frameworks	40.4	46.4	42.7
Relationship-based practices with infants and toddlers	23.4	39.3	29.3
Licensing issues	22.3	23.2	22.7
Business practices, program management, and/or fiscal management	8.5	17.9	12.0
Accreditation	10.6	12.5	11.3
Other	1.1	1.8	1.3
Number of respondents	98	58	156

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some formal peer support from June 2014 through March 2015. Number of missing responses varies from two to eight counts by content area and by staff type. The content areas are ordered from highest to lowest by total percentage reported. Respondents could select more than one content area.

Exhibit 5B.37. Locations and Requirements for Formal Peer Support by Staff Type: Centers (June 2014–March 2015)

	Lead	Assistant	All
		Percentage	
Received formal peer support			
In person at my center	86.3	89.1	87.3
In-person, off-site, away from my center	37.9	40.0	38.7
Online/e-mail/video	24.2	23.6	24.0
By phone	6.3	10.9	8.0
Type of incentive/requirement to participate in peer support			
Wanted to participate for my own self-improvement	34.4	40.0	36.5
Required by my center	38.7	29.1	35.1
Received financial stipend	19.4	16.4	18.2
Received free classroom materials	16.1	21.8	18.2
No incentives	34.4	38.2	35.8
Required for other reason	7.5	5.5	6.8
Received priority enrollment	7.5	9.1	8.1
Other	1.1	5.5	2.7
Number of respondents	98	58	156

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some formal peer support from June 2014 through March 2015. Number of missing responses varies from three to eight counts by item and by staff type. Respondents could select more than one response option within each section.

Exhibit 5B.38. Received Formal Peer Support Through a Specific Program by Staff Type: Centers (June 2014–March 2015)

Program	Lead	Assistant	All
		Percentage	
Provided through a particular program	29.6	18.5	25.4
Not provided through a particular program	25.0	27.8	26.1
Don't know/uncertain	45.5	53.7	48.6
Number of respondents	98	58	156

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some formal peer support from June 2014 through March 2015. Number of missing responses varies from 4 to 14 counts by staff type. Specific programs include Quality Preschool Initiative, Head Start, Race to the Top, and so on.

Exhibit 5B.39. Formal Peer Support Hours per Person per Month: FCCHs) (June 2014–March 2015)

Lead Staff (*N*=13)	Mean	Median	SD	Min	Max
Total hours received from June 2014 to March 2015	30.3	27.0	28.3	2.0	100.0
June 2014	1.6	1.0	2.2	0.0	6.0
July 2014	1.3	0.0	1.7	0.0	4.0
Aug 2014	6.8	2.0	16.2	0.0	60.0
Sept 2014	2.0	2.0	1.8	0.0	5.0
Oct 2014	3.0	2.0	3.9	0.0	15.0
Nov 2014	2.9	2.0	4.0	0.0	15.0
Dec 2014	2.2	2.0	2.9	0.0	10.0
Jan 2015	3.1	3.0	2.8	0.0	10.0
Feb 2015	3.4	2.0	3.9	0.0	15.0
Mar 2015	4.0	3.0	5.2	0.0	20.0

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. The summary of each item is calculated based on respondents who reported having received some formal peer support from June 2014 through March 2015. SD=standard deviation.

Exhibit 5B.40. Formal Peer Support Frequency per Person per Month: FCCHs (June 2014–March 2015)

Lead Staff (*N*=13)	Not at All	1 or 2 Times	3 or 4 Times	5 or More Times
	Percentage			
Times received each month				
June 2014	36.4	54.6	9.1	0.0
July 2014	45.5	54.6	0.0	0.0
Aug 2014	20.0	80.0	0.0	0.0
Sept 2014	18.2	72.7	9.1	0.0
Oct 2014	16.7	50.0	25.0	8.3
Nov 2014	16.7	50.0	25.0	8.3
Dec 2014	25.0	58.3	16.7	0.0
Jan 2015	16.7	41.7	41.7	0.0
Feb 2015	8.3	58.3	33.3	0.0
Mar 2015	8.3	50.0	33.3	8.3

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some formal peer support from June 2014 through March 2015. Number of missing responses varies from zero to one count by month.

Exhibit 5B.41. Consistent Participation in Formal Peer Support: FCCHs (September 2014–March 2015)

Measure	FCCH Staff
	Percentage
Received formal peer support every month from Sept 2014 to March 2015	46.2
Number of respondents	13

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on respondents who reported having received some formal peer support from June 2014 through March 2015 and for whom we had sufficient information across the months of September 2014 to March 2015 to make a determination of consistent participation.

Exhibit 5B.42. Formal Peer Support Intensity of Top Three Most Reported Content Areas: FCCHs (June 2014–March 2015)

FCCH Staff (*N*=13)	No Time	25% or Less	25% to 50%	50% to 75%	75% or More
			Percentage		
Social and emotional development	7.7	15.4	30.8	30.8	15.4
Language development/literacy	7.7	15.4	53.9	7.7	15.4
Math/cognitive development	8.3	33.3	41.7	8.3	8.3

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some formal peer support from June 2014 through March 2015. Number of missing responses varies from zero to one count by content area.

Exhibit 5B.43. Formal Peer Support Content Areas From Most Reported to Least Reported: FCCHs (June 2014–March 2015)

Content Area	FCCH Staff
	Percentage
Language development/literacy	92.3
Social and emotional development	92.3
Math/cognitive development	91.7
Materials and learning environment	83.3
Child assessment and developmental screening	83.3
Family engagement	83.3
Understand/improve scores on ECERS/FCCERS/ITER	75.0
Health and safety	75.0
Teacher	66.7
Subjects other than language or math	58.3
Cultural/language diversity	58.3
Understand/improve scores on CLASS	58.3
Business practices, program management, and/or fiscal management	58.3
Physical development and health	50.0
California Preschool Learning Foundations and Frameworks	50.0
Child behavior management	50.0
Classroom management	41.7
English language development	33.3
Special needs or inclusion	33.3
Licensing issues	33.3
A specific curriculum	25.0
Accreditation	16.7
Other	0.0
Number of respondents	13

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some formal peer support from June 2014 through March 2015. Number of missing responses varies from zero to one count by content area. The content areas are ordered from highest to lowest by total percentage reported. Respondents could select more than one content area.

Exhibit 5B.44. Locations and Requirements for Formal Peer Support: FCCHs (June 2014–March 2015)

	FCCH Staff
	Percentage
Received coaching support	
In person at my FCCH	92.3
In-person, off-site, away from FCCH	61.5
By phone	61.5
Online/e-mail/video	46.2
Type of incentive/requirement to participate in coaching	
Wanted to participate for my own self-improvement	69.2
Required by my FCCH	0.0
Received financial stipend	7.7
Received free classroom materials	38.5
No incentives	15.4
Required for other reason	0.0
Received priority enrollment	0.0
Other	7.7
Number of respondents	13

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some formal peer support from June 2014 through March 2015.

Exhibit 5B.45. Received Formal Peer Support Through a Specific Program: FCCHs (June 2014–March 2015)

Program	FCCH Staff
	Percentage
Provided through a particular program	69.2
Not provided through a particular program	7.7
Don't know/uncertain	23.1
Number of respondents	13

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some formal peer support from June 2014 through March 2015. Number of missing responses is one. Specific programs include Quality Preschool Initiative, Race to the Top, and so on.

Credit-bearing College or University Courses

Exhibit 5B.46. Credit-bearing Course Units per Person per Semester by Staff Type: Centers (June 2014–March 2015)

Lead Staff (*N*=42)	Mean	Median	SD	Min	Max
Total units completed from summer 2014 to winter 2015	7.7	6.0	5.1	1.0	18.0
Summer 2014	2.6	1.0	3.3	0.0	10.0
Fall 2014	4.3	3.0	3.7	0.0	15.0
Winter 2015	2.2	1.3	2.5	0.0	9.0
Assistant Staff (*N*=32)	**Mean**	**Median**	**SD**	**Min**	**Max**
Total units completed from summer 2014 to winter 2015	10.3	8.5	6.9	1.0	28.0
Summer 2014	4.3	3.0	4.5	0.0	15.0
Fall 2014	5.3	5.5	3.5	0.0	16.0
Winter 2015	3.2	3.0	2.4	0.0	7.0
All Staff (*N*=74)	**Mean**	**Median**	**SD**	**Min**	**Max**
Total units completed from summer 2014 to winter 2015	8.9	6.0	6.1	1.0	28.0
Summer 2014	3.4	3.0	4.0	0.0	15.0
Fall 2014	4.7	3.0	3.6	0.0	16.0
Winter 2015	2.6	3.0	2.5	0.0	9.0

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Summary of each item is calculated based on nonmissing cases for respondents who reported having completed some credit-bearing course units from summer 2014 through winter 2015. Number of missing responses varies from 3 to 34 counts by month and by staff type. Analyses omit one respondent who indicated having received 105 credits from fall 2014 to winter 2015, which far exceeded all other responses. Units for quarter-system courses are converted to semester-equivalent units. SD=standard deviation.

Exhibit 5B.47. Focus and Topic Area Covered in Credit-bearing Courses From Most Reported to Least Reported by Staff Type: Centers (June 2014–March 2015)

Content Area	Lead	Assistant	All
		Percentage	
Focus of credit-bearing courses			
Early childhood education ECE) courses	73.7	55.6	66.2
Non-ECE courses	10.5	22.2	15.4
Both ECE and non-ECE courses	15.8	22.2	18.5
Number of respondents	42	32	74
ECE topic areas			
Child growth and development	50.0	52.4	50.9
Child/family and community	31.3	28.6	30.2
Introduction to curriculum	31.3	28.6	30.2
Observation and assessment	25.0	38.1	30.2
Principles and practices of teaching young children	18.8	38.1	26.4
Teaching in a diverse society	21.9	23.8	22.6
Special-needs child	21.9	23.8	22.6
Health/safety and nutrition	12.5	28.6	18.9
Adult supervision	9.4	9.5	9.4
Practicum	3.1	14.3	7.6
Administration	3.1	0.0	1.9
Other ECE course focus	12.5	9.5	11.3
Number of respondents	37	26	63

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having completed some credit-bearing courses from summer 2014 through winter 2015. Number of missing responses varies from 5 to 10 counts by content area and by staff type. The content areas are ordered from highest to lowest by total percentage reported. Respondents could select more than one ECE topic area.

Exhibit 5B.48. Locations for Credit-bearing Courses by Staff Type: Centers (June 2014–March 2015)

	Lead	Assistant	All
		Percentage	
Attended credit-bearing courses			
In person, on college campus	86.1	83.3	84.9
In person, off college campus	8.3	10.0	9.1
Online through college	19.4	23.3	21.2
Number of respondents	42	32	74

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some credit-bearing courses from summer 2014 through winter 2015. Number of missing responses varies from two to six counts by staff type. Respondents could select more than one location.

Exhibit 5B.49. Support Provided for Credit-bearing Courses by Staff Type: Centers (June 2014–March 2015)

	Lead	Assistant	All
		Percentage	
Received financial stipend/scholarship for courses			
Yes	32.4	31.0	31.8
No	59.5	65.5	62.1
Don't know	8.1	3.5	6.1
Type of support during course			
Academic counseling or advisement	20.0	32.1	25.4
Tutoring	17.1	21.4	19.1
Peer support groups	20.0	14.3	17.5
Access to resources	20.0	14.3	17.5
Career guidance	5.7	28.6	15.9
Language support	2.9	3.6	3.2
No support provided	54.3	39.3	47.6
Number of respondents	42	32	74

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some credit-bearing courses from summer 2014 through winter 2015. Number of missing responses varies from 4 to 11 counts by item and by staff type. Respondents could select more than one type of support.

Exhibit 5B.50. Programs Providing Support for Credit-bearing Courses by Staff Type: Centers (June 2014–March 2015)

Program	Lead	Assistant	All
		Percentage	
AB212 or CARES Plus program	60.0	47.6	53.7
Child Development Training Consortium	30.0	14.3	22.0
Child Development Grant (Student Aid Commission)	25.0	4.8	14.6
Family Child Care at Its Best	5.0	0.0	2.4
Child Signature Program (CSP)	5.0	0.0	2.4
ECE Workforce Initiative/Child Development Workforce Initiative	0.0	4.8	2.4
SF SEED	5.0	0.0	2.4
Quality Preschool Initiative (QPI)	5.0	0.0	2.4
Project Vistas	0.0	0.0	0.0
Metro Early Childhood Academy	0.0	0.0	0.0
San Jose State University BA Cohort	0.0	0.0	0.0
Race to the Top	0.0	0.0	0.0
Head Start	0.0	0.0	0.0
Don't know/uncertain	10.0	38.1	24.4
Other	5.0	0.0	2.4
Number of respondents	21	20	41

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some financial stipend or support for credit-bearing courses from summer 2014 through winter 2015. Respondents could select more than one program. AB212 or CARES Plus program includes county-specific programs such as ASPIRE, PIECES, and so on.

Exhibit 5B.51. Credit-bearing Course Units per Person per Semester: FCCHs (June 2014–March 2015)

FCCH Staff (*N*=13)	Mean	Median	SD	Min	Max
Total units completed from summer 2014 to winter 2015	9.5	8.0	6.3	3.0	27.0
Summer 2014	4.1	3.0	3.2	2.0	12.0
July 2014	6.4	6.0	5.6	3.0	13.0
Aug 2014	4.3	3.0	3.8	2.0	12.0

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Summary of each item is calculated based on nonmissing cases for respondents who reported having completed some credit-bearing courses from summer 2014 through winter 2015. Number of missing responses varies from one to five counts by semester. Units for quarter-system courses are converted to semester-equivalent units. SD=standard deviation.

Exhibit 5B.52. Focus and Topic Area Covered in Credit-bearing Courses From Most Reported to Least Reported: FCCHs (June 2014–March 2015)

Content Area	FCCH Staff
	Percentage
Focus of credit-bearing courses	
Early childhood education ECE) courses	76.9
Both ECE and non-ECE courses	23.1
Non-ECE courses	0.0
Number of respondents	13
ECE topic areas	
Child growth and development	69.2
Child/family and community	46.2
Observation and assessment	30.8
Principles and practices of teaching young children	30.8
Teaching in a diverse society	30.8
Special-needs child	23.1
Health/safety and nutrition	15.4
Introduction to curriculum	15.4
Practicum	7.7
Administration	7.7
Adult supervision	0.0
Other ECE course focus	23.1
Number of respondents	13

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some credit-bearing courses from summer 2014 through winter 2015. The content areas are ordered from highest to lowest by total percentage reported. Respondents could select more than one ECE topic area.

Exhibit 5B.53. Locations for Credit-bearing Courses: FCCHs (June 2014–March 2015)

	FCCH Staff
	Percentage
Attended credit-bearing courses	
In person, on college campus	61.5
In person, off college campus	23.1
Online through college	46.2
Number of respondents	13

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on nonmissing cases for respondents who reported having completed some credit-bearing courses from summer 2014 through winter 2015. Respondents could select more than one location.

Exhibit 5B.54. Support Provided for Credit-bearing Courses: FCCHs (June 2014–March 2015)

	FCCH Staff
	Percentage
Received financial stipend/scholarship for courses	
Yes	53.9
No	38.5
Don't know	7.7
Type of support during course	
Academic counseling or advisement	33.3
Access to resources	8.3
Career guidance	8.3
Tutoring	0.0
Peer support groups	0.0
Language support	0.0
No support provided	41.7
Other	33.3
Number of respondents	13

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on nonmissing cases for respondents who reported having completed some credit-bearing courses from summer 2014 through winter 2015. Number of missing responses varies from zero to one count by item. Respondents could select more than one type of support.

Exhibit 5B.55. Programs Providing Support for Credit-bearing Courses: FCCHs (June 2014–March 2015)

Program	FCCH Staff
	Percentage
Child Development Training Consortium	22.2
San Jose State University BA Cohort	22.2
Child Signature Program (CSP)	11.1
Race to the Top	11.1
AB212 or CARES Plus program	11.1
Child Development Grant (Student Aid Commission)	0.0
Family Child Care at Its Best	0.0
ECE Workforce Initiative/Child Development Workforce Initiative	0.0
Project Vistas	0.0
Metro Early Childhood Academy	0.0
SF SEED	0.0
Head Start	0.0
Quality Preschool Initiative (QPI)	0.0
Don't know/uncertain	33.3
Other	0.0
Number of respondents	9

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received some financial stipend or support for credit-bearing courses from summer 2014 through winter 2015. Respondents could select more than one program. AB212 or CARES Plus program includes county-specific programs such as PIECES and others.

Financial Incentives

Exhibit 5B.56. Receipt of Financial Incentives for Participation in Quality Improvement Efforts and Perceived Importance by Staff Type: Centers (July 2014–June 2015)

Measure	Lead	Assistant	All
		Percentage	
Received financial incentives between July 2014 and June 2015			
Yes	34.7	29.8	32.9
No	52.4	55.8	53.7
Don't know	12.9	14.4	13.5
Importance of availability of financial incentives			
Not important	29.8	20.8	26.3
Somewhat important	23.6	31.7	26.7
Important	23.6	24.8	24.1
Very important	23.0	22.8	22.9
Number of respondents	174	105	279

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases. Number of missing responses for receiving financial incentives varies from one to four counts by staff type. Number of missing responses for importance of availability of financial incentives varies from 4 to 13 counts by staff type.

Exhibit 5B.57. Amount of Financial Incentives Received per Person by Staff Type: Centers (July 2014–June 2015)

	Conditional			Unconditional		
Measure	Lead	Assistant	All	Lead	Assistant	All
			Dollars			
Amount received Jul 2014–Jun 2015						
Mean	1,328	1,050	1,235	461	303	400
Median	1,100	1,000	1,000	0	0	0
Standard deviation	850	665	799	806	593	736
Minimum	20	40	20	0	0	0
Maximum	2,900	2,650	2,900	2,900	2,650	2,900
Number of respondents	59	31	90	147	90	237

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Conditional amounts are calculated based on nonmissing cases for respondents who reported having received any financial incentives from July 2014 through June 2015. Unconditional amounts are calculated based on all survey respondents whether or not they answered Yes to the initial question. An answer of No is equal to zero dollars, and an answer of Don't Know is treated as missing. Number of missing responses for conditional cases varies from five to nine counts by staff type. Number of missing responses for unconditional cases varies from 16 to 26 by staff type. Analyses also omit one respondent who indicated having received "$1.4" from July 2014 to June 2015.

Exhibit 5B.58. Quality Improvement Activities Covered by Financial Incentives by Staff Type: Centers (July 2014–June 2015)

Measure	Lead	Assistant	All
		Percentage	
Coaching/mentoring	57.4	40.7	51.9
Noncredit courses, seminars, workshops, or training programs	59.3	44.4	54.3
Credit-bearing college or university courses	18.5	51.9	29.6
Formal peer support activities	20.4	14.8	18.5
Other	5.6	7.4	6.2
Number of respondents	59	31	90

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received any financial incentives from July 2014 through June 2015. Number of missing responses varies from two to six counts by staff type. Respondents could select more than one activity.

Exhibit 5B.59. Programs Reported as Financial Incentive Providers by Staff Type: Centers (July 2014–June 2015)

Program	Lead	Assistant	All
		Percentage	
AB212 or CARES Plus program	43.9	55.2	47.7
Quality Preschool Initiative (QPI) stipend	38.6	31.0	36.1
Career Incentive Grants (Child Development Training Consortium-CDTC)	5.3	17.2	9.3
Child Development Permit Stipends (CDTC)	3.5	6.9	4.7
SF SEED	5.3	0.0	3.5
Child Signature Program (CSP)	3.5	3.5	3.5
Preschool Bridging Model (PBM)	1.8	3.5	2.3
Child Development Grant (Student Aid Commission)	3.5	0.0	2.3
ECE Student Career and Education Program (CDTC)	3.5	0.0	2.3
ECE Workforce Initiative or Child Development Workforce Initiative	0.0	0.0	0.0
RTT-ELC QRIS Scholarship	0.0	0.0	0.0
San Jose State University BA Cohort	0.0	0.0	0.0
Don't know/uncertain	1.8	3.5	2.3
Other	7.0	0.0	4.7
Number of respondents	59	31	90

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received any financial incentives from July 2014 through June 2015. Respondents could select more than one program. AB212 or CARES Plus program includes county-specific programs such as ASPIRE, PIECES, and so on. Number of missing responses is two counts for each staff type.

Exhibit 5B.60. Receipt of Financial Incentives for Participation in Quality Improvement Efforts and Perceived Importance: FCCHs (July 2014–June 2015)

Measure	FCCH Staff
	Percentage
Received financial incentives between July 2014 and June 2015	
Yes	40.7
No	48.2
Don't know	11.1
Importance of availability of financial incentives	
Not important	16.0
Somewhat important	28.0
Important	28.0
Very important	28.0
Number of respondents	27

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases. Number of missing responses for importance of availability of financial incentives is two counts.

Exhibit 5B.61. Amount of Financial Incentives Received per Person: FCCHs (July 2014–June 2015)

	Conditional	Unconditional
Measure	FCCH Staff	FCCH Staff
	Dollars	
Amount received July 2014–June 2015		
Mean	972	365
Median	1,000	0
Standard deviation	506	566
Minimum	50	0
Maximum	1,500	1,500
Number of respondents	11	24

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Conditional amounts are calculated based on nonmissing cases for respondents who reported having received any financial incentives from July 2014 through June 2015. Unconditional amounts are calculated based on all survey respondents whether or not they answered Yes to the initial question. An answer of No is equal to zero dollars, and an answer of Don't Know is treated as missing. Number of missing responses for unconditional cases is three counts.

Exhibit 5B.62. Quality Improvement Activities Covered by Financial Incentives: FCCHs (July 2014–June 2015)

Measure	FCCH Staff
	Percentage
Coaching/mentoring	36.4
Noncredit courses, seminars, workshops, or training programs	27.3
Credit-bearing college or university courses	45.5
Formal peer support activities	9.1
Other	27.3
Number of respondents	11

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received any financial incentives from July 2014 through June 2015. Respondents could select more than one activity.

Exhibit 5B.63. Programs Reported as Financial Incentive Providers: FCCHs (July 2014–June 2015)

Program	FCCH Staff
	Percentage
AB212 or CARES Plus program	54.6
Child Development Permit Stipends	18.2
Career Incentive Grants	9.1
San Jose State University BA Cohort	9.1
Child Development Grant (Student Aid Commission)	0.0
Child Signature Program (CSP)	0.0
Early Care and Education (ECE) Student Career and Education Program (CDTC)	0.0
ECE Workforce Initiative or Child Development Workforce Initiative	0.0
Quality Preschool Initiative (QPI)	0.0
RTT-ELC QRIS Scholarship	0.0
SF SEED	0.0
Preschool Bridging Model (PBM)	0.0
Don't know/uncertain	9.1
Other	9.1
Number of respondents	11

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received any financial incentives from July 2014 through June 2015. Respondents could select more than one program. AB212 or CARES Plus program includes county-specific programs such as ASPIRE, PIECES, and so on.

Perceptions of Quality Improvement Activities

Exhibit 5B.64. Reasons for and Barriers to Participating in Quality Improvement (QI) Activities by Staff Type: Centers (June 2014–March 2015)

	Lead	Assistant	All
	Percentage		
Learned about QI activity …			
Through my program or program director	77.3	73.5	75.8
Through First 5 California	24.6	27.5	25.7
Through my colleagues	19.8	25.5	21.9
Through my County Office of Education	22.8	18.6	21.2
Through my own research	12.6	13.7	13.0
Through my local QRIS	11.4	8.8	10.4
Through my local county-level First 5	4.8	5.9	5.2
Through my local R&R	0.0	0.0	0.0
Other	3.6	2.0	3.0
Decided to participate because …			
Personal interest in topic or activity	60.2	58.4	59.6
Identified as part of your classroom or site QI plan	50.6	43.6	47.9
Supervisor recommended it for me	41.0	44.6	42.3
Required to attain educational degree/credential	16.9	22.8	19.1
Financial incentives offered	8.4	16.8	11.6
Other	2.0	1.8	1.9
Barriers to participation			
I don't have enough time.	52.4	55.9	53.7
Activities I want are too expensive.	16.1	22.6	18.5
Activities I want are too far away or difficult to get to.	18.5	15.7	17.4
I am unable to find or pay for child care.	3.6	5.9	4.4
Activities will not benefit enough to justify the time and expense required.	1.8	4.9	3.0
I can't because of conflicts with work hours.	4.2	1.0	3.0
Activities I want are not provided in my primary language.	1.2	3.9	2.2
I am not very or not at all comfortable with QI activities provided in English.	0.6	1.0	0.7
Other reason	4.2	2.0	3.3
No barriers prevent my participation.	34.5	31.4	33.3
Number of respondents	174	105	279

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Respondents could select more than one response option within each section. Percentage of each item is calculated based on nonmissing cases. Number of missing responses varies from 3 to 12 counts by item and by staff type. For barriers to participation, "I am not very or not at all comfortable with QI activities provided in English," was not asked in the same question as the rest of the barrier items. Only those who responded No to English as their primary language responded to the question about comfort levels. The percentages reported here are calculated assuming those whose primary language is English are comfortable with QI activities provided in English.

Exhibit 5B.65. Helpfulness of Quality Improvement (QI) Activities for Improving Practice by Staff Type: Centers (June 2014–March 2015)

Lead Staff	Not Helpful	Somewhat Helpful	Helpful	Very Helpful
		Percentage		
Coaching and mentoring (*N*=142)	1.5	14.2	44.8	39.6
Noncredit training (*N*=132)	0.8	11.6	43.8	43.8
Formal peer support (*N*=98)	8.5	11.7	47.9	31.9
Credit-bearing courses (*N*=42)	8.1	5.4	29.7	56.8
Assistant Staff	**Not Helpful**	**Somewhat Helpful**	**Helpful**	**Very Helpful**
Coaching and mentoring (*N*=81)	1.3	11.4	44.3	43.0
Noncredit training (*N*=69)	1.5	7.5	53.7	37.3
Formal peer support (*N*=58)	0.0	13.2	49.1	37.7
Credit-bearing courses (*N*=32)	0.0	13.8	34.5	51.7
Total Staff	**Not Helpful**	**Somewhat Helpful**	**Helpful**	**Very Helpful**
Coaching and mentoring (*N*=223)	1.4	13.2	44.6	40.9
Noncredit training (*N*=201)	1.1	10.1	47.3	41.5
Formal peer support (*N*=156)	5.4	12.2	48.3	34.0
Credit-bearing courses (*N*=74)	4.6	9.1	31.8	54.6

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having participated in a specific type of QI activity from June 2014 through March 2015. Number of missing responses varies from 2 to 13 counts by QI activity and by staff type.

Exhibit 5B.66. Comparative Helpfulness of Quality Improvement (QI) Activities Conditional on Having Received More Than One QI Activity by Staff Type: Centers (June 2014–March 2015)

	% reporting the listed activity as ***most helpful*** when compared with other QI activities received		
QI Activity	**Lead**	**Assistant**	**All**
	Percentage		
Coaching or mentoring	60.8	50.0	56.9
Didn't receive coaching or only received coaching	*22.4*	*30.5*	*25.4*
[Missing]	*5.7*	*1.7*	*4.7*
Noncredit training	31.0	32.3	31.4
Didn't receive noncredit training or only received noncredit training	*28.7*	*36.2*	*31.5*
[Missing]	*6.3*	*4.8*	*5.7*
Credit-bearing courses	32.4	29.6	31.2
Didn't receive credit courses or only received credit courses	*77.0*	*71.4*	*74.9*
[Missing]	*3.4*	*2.9*	*3.2*
Formal peer support	5.4	12.5	8.2
Didn't receive peer support or only received peer support	*44.3*	*44.8*	*44.4*
[Missing]	*3.4*	*1.9*	*2.9*
Number of respondents	174	105	279

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases for respondents who reported having received more than one QI activity. Staff who did not participate in any QI activities or only participated in one QI activity during our time period were not asked which QI type was most helpful. Thus, the percentage reporting a QI activity as most helpful for any given QI activity is conditional on what other QI activities they participated in. They may be comparing a given QI activity with one, two, or three other activities they participated in. The percentage of staff who were not asked this question is shown in italics for each QI type for reference. For example, the percentage of those who "Didn't receive coaching or only received coaching" are either those who didn't receive coaching at all or those who only received coaching and no other type of QI activity during June 2014 through March 2015.The percentage of missing cases among respondents who received this question also is shown in italics for reference.

Exhibit 5B.67. Topic Areas Staff Would Like to Receive More Support or Training on by Staff Type: Centers

	Lead	Assistant	All
		Percentage	
Child behavior management	59.9	59.4	59.7
Language development/literacy	49.7	44.6	47.8
Social and emotional development	41.3	43.6	42.2
Special needs or inclusion	42.5	41.6	42.2
Math/cognitive development	41.9	41.6	41.8
Child assessment and developmental screening	35.9	45.5	39.6
Subjects other than language or math	34.1	36.6	35.1
Classroom management	33.5	36.6	34.7
Materials and learning environment	29.3	35.6	31.7
English language development	32.3	30.7	31.7
Family engagement	34.7	26.7	31.7
Understand/improve scores on CLASS	32.9	28.7	31.3
Understand/improve scores on ECERS/FCCERS/ITERS	31.7	28.7	30.6
Cultural/language diversity	29.9	29.7	29.9
California Preschool Learning Foundations and Frameworks	28.1	30.7	29.1
Teacher-child interactions	24.6	35.6	28.7
Physical development and health	25.2	28.7	26.5
Health and safety	23.4	29.7	25.8
A specific curriculum	22.8	23.8	23.1
Relationship-based practices with infants and toddlers	19.2	21.8	20.2
Licensing issues	21.6	17.8	20.2
Business practices, program management, and/or fiscal management	18.6	12.9	16.4
Accreditation	18.0	11.9	15.7
Other	1.2	1.0	1.1
Number of respondents	174	105	279

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: Lead staff includes lead teachers and coteachers. Percentage of each item is calculated based on nonmissing cases. Number of missing responses varies from 4 to 11 by staff type. The topic areas are ordered from highest to lowest by total percentage reported. Respondents could select more than one topic area.

Exhibit 5B.68. Reasons for and Barriers to Participating in Quality Improvement (QI) Activities: FCCHs (June 2014–March 2015)

	FCCH Staff
	Percentage
Learned about QI activity …	
Through my colleagues	40.7
Through my program or program director	37.0
Through First 5 California	25.9
Through my County Office of Education	25.9
Through my local R&R	25.9
Through my local QRIS	22.2
Through my own research	0.0
Through my local county-level First 5	7.4
Other	3.7
Decided to participate because …	
Personal interest in topic or activity	81.5
Identified as part of your classroom or site QI plan	37.0
Required to attain educational degree/credential	33.3
Supervisor recommended it for me	29.6
Financial incentives offered	22.2
Other	3.7
Barriers to participation	
I don't have enough time.	50.0
Activities I want are too far away or difficult to get to.	30.8
Activities I want are not provided in my primary language.	19.2
I am not very or not at all comfortable with QI activities provided in English.	18.5
Activities I want are too expensive	15.4
I am unable to find or pay for child care.	3.9
Activities will not benefit enough to justify the time and expense required.	0.0
I can't because of conflicts with work hours.	0.0
Other reason	0.0
No barriers prevent my participation.	26.9
Number of respondents	27

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Respondents could select more than one response option within each section. Percentage of each item is calculated based on nonmissing cases. Number of missing responses varies from zero to one count by item. For barriers to participation, "I am not very or not at all comfortable with QI activities provided in English," was not asked in the same question as the rest of the barrier items. Only those who responded No to English as their primary language responded to the question about comfort levels. The percentage reported here is calculated assuming those whose primary language is English are comfortable with QI activities provided in English.

Exhibit 5B.69 Helpfulness of Quality Improvement (QI) Activities: FCCHs (June 2014–March 2015)

	Not Helpful	Somewhat Helpful	Helpful	Very Helpful
		Percentage		
Coaching and mentoring (*N*=23)	0.0	0.0	31.8	68.2
Noncredit training (*N*=23)	0.0	0.0	36.4	63.6
Credit-bearing courses (*N*=13)	0.0	0.0	23.1	76.9
Formal peer support (*N*=13)	0.0	0.0	16.7	83.3

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on nonmissing cases for respondents who reported having participated in a specific type of QI activity from June 2014 through March 2015. Number of missing responses varies from zero to one count by QI activity.

Exhibit 5B.70. Topic Areas Staff Would Like to Receive More Support or Training on: FCCHs

	FCCH Staff
	Percentage
Child behavior management	46.2
Language development/literacy	53.8
Social and emotional development	46.2
Special needs or inclusion	34.6
Math/cognitive development	30.8
Child assessment and developmental	34.6
Subjects other than language or math	26.9
Classroom management	38.5
English language development	26.9
Family engagement	38.5
Materials and learning environment	30.8
Understand/improve scores on CLASS	34.6
Understand/improve scores on ECERS	30.8
Cultural/language diversity	23.1
California Preschool Learning Foundations and Frameworks	26.9
Teacher-child interactions	42.3
Physical development and health	15.4
Health and safety	26.9
A specific curriculum	26.9
Licensing issues	19.2
Relationship-based practices with infants and toddlers	34.6
Business practices, program management, and/or fiscal management	30.8
Accreditation	34.6
Other	3.9
Number of respondents	27

SOURCE: Authors' analysis of the 2014–15 California QRIS Study Staff Survey.

NOTE: FCCH staff includes both lead and assistant staff. Percentage of each item is calculated based on nonmissing cases. Number of missing responses is one. The topic areas are ordered to match center staff ordering in appendix exhibit 5B.67. Respondents could select more than one topic area.

Appendix 6A. Director Survey

CALIFORNIA QRIS STUDY
DIRECTOR SURVEY SPRING 2015

INTRODUCTION AND CONSENT

Thank you for participating in this survey! This survey, developed for an evaluation study conducted by the American Institutes for Research (AIR) and RAND for the California Department of Education, is intended to collect information about the supports you and your program have received to improve program quality.

Before you get started, here is some important information about the survey and about your responses:

- Your personal information will be kept confidential and will not be shared with anyone outside the research team.
- Results from this survey will never be presented in a way that would identify you or your program. In any written reports of the data obtained from this survey, your responses will be combined with others in summary form. Your responses will not be shared with other staff from your program.
- Your participation is voluntary. You may choose not to participate or to skip questions you do not wish to answer, without penalty. However, we encourage you to participate, as completing the survey gives you the opportunity to share your experiences. Your answers will help to inform the California Department of Education about the supports received or needed by early learning staff involved in quality rating and improvement systems in California.
- There are no right or wrong answers. Your honest responses will help program- and state-level administrators understand how early learning staff are experiencing efforts to improve practice and promote children's learning.
- It should take you about 30 minutes to complete the survey. To thank you for your time, please enjoy the $20 online gift card code that was included in your invitation letter. Upon your completion of the survey, we will send you a follow up email or letter with that same code for your records.
- If you run into problems or have questions when completing the survey, or if you would like more information about the study, please contact us at caqrisstudy@rand.org.
- For questions regarding your rights as a participant in this study, you may contact AIR's Institutional Review Board (IRB) at IRBchair@air.org or 1-800-634-0797.

By clicking NEXT, you are indicating that you have read and understood the information provided to you and agree to participate in this survey.

IMPORTANT NOTES AND DEFINITIONS

[Note for Centers] In this survey, we will refer to **RTT-ELC QRIS** – Race to the Top-Early Learning Challenge Quality Rating and Improvement System. Depending on what county you are located in, you may know this as:

- Quality Counts – First 5 Alameda
- Early Stars – Fresno County Office of Education
- LA STEP – Los Angeles County Office of Child Care Steps to Excellence Program
- LAUP – Los Angeles Universal Preschool
- QualityStart OC – Orange County Office of Education
- Sacramento County Office of Education
- Quality Preschool Initiative (QPI) – First 5 San Diego
- Preschool for All – First 5 San Francisco
- Race to the Top – Raising Quality! – First 5 San Joaquin
- FIRST 5 Santa Clara
- QRIS First 5 Ventura

Please keep your local QRIS in mind as you answer questions.

You were invited to complete this survey because you have been identified as the site-level administrator who will be able to provide information about your center. We use the term **director/supervisor** in this survey to mean center site-level directors and supervisors, or site-level administrators more generally. In general, please answer for yourself and your role at the site.

[Note for FCCHs] In the next part of this survey, we will ask you questions based on your role as the administrator of this family child care home. We use the term **director** in this survey to include family child care home owners.

We will be asking you some questions about your participation in **RTT-ELC QRIS**…

DIRECTOR/SUPERVISOR EXPERIENCE AND EDUCATION

We would like to start by asking you a few questions about your work experience and education.

DR2. ***[Centers only]*** **Please describe your current role at this site. Are you:**

a. Center director, site supervisor, or equivalent [go to 2]
b. Something other than director, site supervisor, or equivalent [go to 1_1]

1_1 What is your job title? (Please write in your job title.) _____

DR3. **Approximately when did you begin work in your current role at this site?**

a. MONTH: _____ [MM]
b. YEAR: _____ [YYYY]

DR4. **Altogether, how many years have you been a director/supervisor or teacher of children birth to age 5 in this as well as other programs?**

____Years [enter number]
____If less than one year, how many months? [enter number]

DR5. ***[Centers only – FCCHs asked in staff survey]*** **What is the highest level of education you have completed so far?**

(Please select one.)

a. Some high school *[go to question DR7]*
b. GED *[go to question DR7]*
c. High School diploma *[go to question DR7]*
d. Some college [no degree] *[go to next question]*
e. Associate's degree *[go to next question]*
f. Bachelor's degree *[go to next question]*
g. Some graduate coursework *[go to next question]*
h. Master's degree *[go to next question]*
i. Ed.D., Ph.D., J.D., or other higher degree *[go to next question]*

DR6. ***[Centers only – FCCHs asked in staff survey]*** **About how many college units have you completed in Early Childhood or Child Development?**

(Please enter number for semester or quarter units as appropriate. If none, enter "0")

____ Semester units completed
____ Quarter units completed

DR7. **About how many college units have you completed in management/administration?**

(Please enter number for semester or quarter units as appropriate. If none, enter "0")

____ Semester units completed
____ Quarter units completed

DR8. Do you have a Child Development Site Supervisor Permit?

- ☐ Yes
- ☐ No
- ☐ Don't know

DR9. Do you have a Child Development Program Director Permit?

- ☐ Yes
- ☐ No
- ☐ Don't know

DR10. *[Centers only – FCCHs asked in staff survey]* Are you currently enrolled in a college or university degree program?

- ☐ Yes, with an Early Childhood Education-related major
- ☐ Yes, with a non-ECE-related major
- ☐ Yes, no major decided yet
- ☐ No

QRIS PARTICIPATION AND FAMILY/PUBLIC AWARENESS

DR11. Why did your site decide to participate in the RTT-ELC QRIS?

(Please select all that apply.)

a. To improve the quality of our program.
b. To gain more professional recognition.
c. To make our program more attractive to parents.
d. To gain new ideas for our program.
e. To get the grants and other financial incentives that RTT-ELC QRIS offers.
f. To get the technical assistance that RTT-ELC QRIS offers.
g. To attract and retain qualified staff.
h. To increase our business.
i. Our site was expected to participate.
j. Other (please specify): _____
k. Don't know

DR12. Does your site engage in any of the following family or public awareness efforts specifically to inform parents about your site's involvement in RTT-ELC QRIS?

(Please select all that apply.)

a. We display a poster or sign that says we are part of the QRIS
b. We note our involvement on our site's website
c. We mention our involvement to new families when they enroll or inquire about our program
d. We mention our involvement in newsletters sent to parents and families
e. We mention our involvement at parent or family engagement events at our site
f. We mention out involvement to local elementary schools
g. Other (please specify):
h. We don't currently engage in family or public awareness efforts about our QRIS involvement.

QUALITY IMPROVEMENT SUPPORT EFFORTS AT SITE *[Centers only for this section]*

Next, we would like to ask about your site's support for quality improvement activities or efforts designed to improve your staff's early childhood practice and your program's quality. Quality improvement activities can include things such as ongoing professional development through coaching or training courses as well as financial or other incentives for staff to continue their formal education. Your site may have supported several of the types of activities or efforts listed, or you may have supported just one or none of these activities, and that is okay, too. Please tell us just about the activities your site has supported.

DR13. In the past year, were site staff <u>required</u> to participate in professional development activities to improve their practice or program quality? Please indicate which of the following types of activities staff were required to participate in.
(Please select one response for each type.)

A. Coaching or mentoring supports **Support for individualized professional development, usually one-on-one or as part of a classroom team, provided to staff by a coach, mentor, or advisor to help improve their practice or to promote quality improvement more generally.**	Yes, <u>all</u> teaching staff were required to receive coaching or mentoring support	Yes, <u>some</u> teaching staff were required to receive coaching or mentoring support	No, teaching staff were not required to receive coaching or mentoring support
B. Noncredit courses, seminars, workshops, or training programs **A training activity that may be one-time or part of a series (including courses that provide Continuing Education Units but not including courses taken for formal college credit through a college or university).**	Yes, <u>all</u> teaching staff were required to participate in noncredit training	Yes, <u>some</u> teaching staff were required to participate in noncredit training	No, teaching staff were not required to participate in noncredit training
C. Credit-bearing college or university courses **Course(s) staff completed for unit credit at a two- or four-year college or university.**	Yes, <u>all</u> teaching staff were required to take credit-bearing courses	Yes, <u>some</u> teaching staff were required to take credit-bearing courses	No, teaching staff were not required to take credit-bearing courses
D. Peer support activities **Formal arrangements such as learning communities, peer support networks, or reciprocal peer coaching to discuss shared experiences and exchange ideas, information, and strategies for professional development or for program improvement more generally. Please do not include informal or occasional discussions with colleagues.**	Yes, <u>all</u> teaching staff were required to participate in formal peer support activities	Yes, <u>some</u> teaching staff were required to participate in formal peer support activities	No, teaching staff were not required to participate in formal peer support activities

DR14. Are site staff required to participate in professional development activities for a minimum number of hours each year?

(Please select all that apply.)

- ☐ Yes, lead teachers must have a minimum number of professional development hours each year.
- ☐ Yes, assistant teachers must have a minimum number of professional development hours each year.
- ☐ Yes, site administrators must have a minimum number of professional development hours each year.
- ☐ No, we have no minimum hours requirement.

DR15. Overall, which one of the following professional development activities do you feel is the most helpful in improving a teacher's effectiveness in the classroom?

(Please select one.)

a. Coaching/mentoring
b. Noncredit courses, seminars, workshops, or training programs
c. Credit-bearing college or university courses
d. Formal peer support activities

DR16. Are teachers at your site offered any of the following supports to encourage them to engage <u>specifically</u> in professional development or other quality improvement activities such as coaching or workshops?

(Please select one response for each row.)

Paid time off	Yes	No
Substitute teacher provided	Yes	No
Bonuses or stipends	Yes	No
Funds to help cover travel costs	Yes	No
Classroom materials	Yes	No
Tuition support	Yes	No
Other (please specify): _____	Yes	No

FINANCIAL INCENTIVES

DR17. Has your site received any financial benefits such as grants or awards from participating in the RTT-ELC QRIS?

(Please select one.)

a. Yes
b. No→ [*Skip next question]*
c. Don't know/uncertain → *[Skip next question]*

DR18. How have you used any financial grants or awards the site received or expects to receive through RTT-ELC QRIS participation from July 2014 through June 2015?

(Please select all that apply.)

- ☐ Staff bonuses/stipends
- ☐ General support for operating costs
- ☐ Staff training/coaching
- ☐ Materials/curriculum purchases
- ☐ Facilities improvements
- ☐ Other (please specify) _____
- ☐ Don't know/uncertain
- ☐ No financial benefits were received in this time period

SITE ADMINISTRATION AND QUALITY IMPROVEMENT

DR19. Are you familiar with either the Program Administration Scale (PAS) or Business Administration Scale (BAS)?

- ☐ Yes
- ☐ No

DR20. Has your site completed any of the following administrative or site-level assessments within the last 5 years? Do <u>not</u> include any ECERS, ITERS, FCCERS, or CLASS assessments when you answer.

(Please select all that apply.)

a. PAS or BAS self-assessment and continuous program quality improvement action plan
b. Assessment using the Office of Head Start Monitoring Protocols *[Centers only]*
c. NAEYC accreditation self-study *[Centers only]*
d. National Association for Family Child Care accreditation self-study *[FCCHs only]*
e. Other assessment (Please specify) _____
f. Don't know
g. No, our site has not completed a site-level assessment within the last 5 years.

DR21. *[Centers only]* Does your site currently have NAEYC accreditation?

- ☐ Yes
- ☐ No

DR22. How familiar are you with the California Department of Education's *Infant-Toddler and Preschool Learning Foundations* and *Curriculum Frameworks*?

(Please select one.)

a. I have never heard of these.
b. I am somewhat familiar with them but we have not really used them to guide instructional practices or curriculum selection.
c. We use them to guide instructional practice or curriculum selection.

Now we would like to ask you some questions about how your site may support staff in implementing new knowledge they gain from professional development or quality improvement activities.

DR23. ***[Centers only]*** **There are many ways to encourage using new knowledge gained in professional development or quality improvement activities to classroom practice. Which of the following practices are used at your site?**

(Please select all that apply.)

a. Set aside time for teachers to share knowledge with other teachers
b. Encourage teachers to try out new ideas in their classrooms
c. Encourage teachers to work in teams with other staff to put new knowledge into practice
d. Provide teachers planning time to turn new ideas into classroom practice
e. Encourage teachers to discuss new ideas with their coach or supervisor before implementing them in their classroom
f. Encourage mentor teachers, coaches, and supervisors to mentor staff on how to implement new knowledge and practices
g. Check in with staff to make sure they have resources they need to implement new knowledge in the classroom
h. Periodically observe classrooms to ensure staff are implementing new knowledge as intended
i. Other (please specify):

DR24. ***[Centers only]*** **What resources are available to staff at your site to encourage the discussion and adoption of new classroom practices?**

(Please select all that apply.)

a. Planning time
b. Release time
c. Classroom materials
d. Teacher support staff, such as coaches
e. Teacher teams that review new practices and develop implementation plans
f. Other (please specify):
g. No specific resources like the ones listed above are available

DR25. ***[Centers only]*** **Many site administrators believe there is value in the idea of improving instruction by implementing new ideas in classrooms. But there are also issues that may need to be considered before changes are made. Please indicate below how important each of the following considerations is to you when you think about supporting changes to classroom instruction.**

(Please select one response for each row.)

	Very important consideration	Somewhat important consideration	Not an important consideration
a. Classroom practice should be fairly similar across classrooms that serve children of the same age.			
b. Staying true to our curriculum; new practices have to be examined before they are implemented to make sure they don't weaken the curriculum.			
c. Staff may lack the skills to implement new knowledge on their own without supervision or support.			
d. Short-term professional development activities may not adequately prepare staff to implement new practices.			
e. New practices cannot be successfully implemented without adequate training.			
f. New practices cannot be successfully implemented without ongoing self-assessment, monitoring and instructional coaching.			

PERCEPTIONS OF TIER ADVANCEMENT

Now we would like to ask you a few questions related to the tier levels in the RTT-ELC QRIS.

DR26. What is your site's current RTT-ELC QRIS rating?

(Please select one.)

a. Tier 1
b. Tier 2
c. Tier 3
d. Tier 4
e. Tier 5 *[Skip to question DR28]*
f. Don't know
g. Not yet rated

DR27. Is your site actively taking steps now to prepare to move up to the next tier level in the future?

a. Yes
b. No
c. Don't know/uncertain

DR28. In your opinion, which of the following issues pose barriers to moving up to the next tier level?

(Please respond to each. Select one response for each row.)

Potential barriers to improving tier level	Major barrier	Minor barrier	Not a barrier	Not applicable
Finding the time to complete tasks required for the next level				
Completion of required staff education levels				
Completion of required annual staff professional development training				
Insufficient funding to meet standards or education requirements				
Insufficient funding to increase and or sustain staff or director compensation (salary and benefits) to reward increased education levels				
Getting the paperwork and documentation in order				
Having to wait months to get the next ERS or CLASS assessment				
Preparing for and meeting the required ERS score				
Preparing for and meeting the required CLASS score				
Insufficient feedback and support from technical assistance provider				

Other (please specify):				

DR29. Are there particular RTT-ELC QRIS rating elements you view as especially <u>difficult</u> to attain?
(Please select all that apply.)

a. Child observation
b. Developmental and health screenings
c. Minimum qualifications for Lead Teacher/Family Child Care Home
d. Effective Teacher-Child Interactions: CLASS Assessments
e. Program Environment Rating Scale (ECERS-R, ITERS-R, FCCERS-R)
f. Ratios and Group Size *[Centers only]*
g. Director Qualifications *[Centers only]*
h. Don't know/uncertain

DR30. Are there particular RTT-ELC QRIS rating elements you view as especially <u>easy</u> to attain?
(Please select all that apply.)

a. Child observation
b. Developmental and health screenings
c. Minimum qualifications for Lead Teacher/Family Child Care Home
d. Effective Teacher-Child Interactions: CLASS Assessments
e. Program Environment Rating Scale (ECERS-R, ITERS-R, FCCERS-R)
f. Ratios and Group Size *[Centers only]*
g. Director Qualifications *[Centers only]*
h. Don't know/uncertain

ADDITIONAL SITE BACKGROUND

We are now going to ask you a few general questions about your site.

DR31. In the past year, what percentage of your teaching staff (lead teachers and assistant teachers) have left and been replaced?

(Please select one.)

a. None have left and been replaced *[skip to question DR33]*
b. 1-10%
c. 11-20%
d. 21-30%
e. 31-40%
f. 41-50%
g. More than 50%

DR32. Which of the following do you believe were among the reasons for staff leaving the site?

(Please select all that apply.)

a. Requirements for additional education were too high or difficult to achieve.
b. Requirements for annual professional development training were too high.
c. Wage was too low.
d. Benefits were not sufficient (for example, health insurance, paid sick days)
e. Staff did not want to participate in program quality assessments (such as ERS or CLASS)
f. Did not get along with other site staff
g. Moved to another early childhood position or job
h. Moved away from area
i. Retired
j. Other (please specify):

DR33. Overall, do you believe the new staff who were hired have been more qualified, about as qualified, or less qualified than those who left?

(Please select one.)

a. More qualified than the staff who left
b. About as qualified as the staff who left
c. Less qualified than the staff who left
d. Don't know/unable to tell

DR34. Approximately what percentage of children enrolled at your site primarily speaks a language other than English?

(Please select one.)

a. 0-25 percent
b. 26-50 percent
c. 51-75 percent
d. 76-100 percent

DR35. Approximately what percentage of children enrolled at your site are receiving free or reduced fee care?

(Please select one.)

a. 0-25 percent
b. 26-50 percent
c. 51-75 percent
d. 76-100 percent

DR36. Do teachers follow a written curriculum when planning activities for the children in their group?

a. Yes
b. No *[skip to question DR37]*
c. Don't Know *[skip to question DR37]*

DR37. What is the name of the curriculum that teachers follow?

(Please select all that apply.)

i Bank Street
ii Bright Beginnings
iii Bright Horizons / The World at Their Fingertips
iv Building Blocks
v Creating Child Centered Classrooms – Step by Step
vi Creative Curriculum
vii Core Knowledge
viii Curiosity Corner
ix DLM Early Childhood Express
x Doors to Discovery
xi Early Literacy and Learning Model (ELLM)
xii High Reach
xiii High/Scope
xiv Houghton-Mifflin PreK
xv Investigator Club
xvi Letter People
xvii Literacy Express
xviii Little Treasures
xix Mathematics Their Way
xx Montessori
xxi Opening the World of Learning (OWL)
xxii PASSPORTS
xxiii Preschool Sequence
xxiv Project Construct
xxv Ready Set Leap
xxvi Reggio Emilia
xxvii Saxon Early Learning
xxviii Scholastic Curriculum
xxix Tools of the Mind
xxx Waldorf
xxxi We Can
xxxii Wright Skills/Growing with Mathematics
xxxiii A faith-based curriculum
xxxiv Locally-developed curriculum
xxxv Other (please specify):

PERSONAL QUALITY IMPROVEMENT SUPPORTS *[Centers only for this section – FCCHs asked in staff survey]*

Now we would like to ask you some questions about your own personal involvement in professional development and quality improvement activities. Please answer these questions thinking about your own activities and not for the site as a whole or another person.

DR38. During the 10-month period from June 2014 through March 2015, did you personally receive any support of the following types to improve your practice or program quality?
(For each type of support received, please indicate the approximate number of hours of involvement over the 10-month period.)

Type of Support	None	8 hours or less	9-24 hours	25-40 hours	More than 40 hours
Coaching/mentoring	☐	☐	☐	☐	☐
Noncredit courses, seminars, workshops, or training programs	☐	☐	☐	☐	☐
Formal peer support activities	☐	☐	☐	☐	☐

DR39. Did you complete any summer 2014, fall 2014, or winter 2015 college or university courses for unit credit?

☐ Yes
☐ No

DR40. Thinking about all the types of professional development and quality improvement support you received from June 2014 through March 2015, what content areas were addressed? (Please select all that apply.)

Child Development and Instructional Practice	Select all that apply
Language development/literacy	☐
Math/cognitive development	☐
Social and emotional development	☐
Subjects other than language development or math, such as science or music	☐
Materials and learning environment	☐
Physical development and health	☐
English language development (for dual language learners)	☐
A specific curriculum	☐
Special needs or inclusion	☐
California Preschool Learning Foundations and Frameworks	☐
Cultural/language diversity	☐
Teacher-child interactions	☐
Relationship-based practices with infants and toddlers	☐
Child behavior management	☐
Classroom management	☐
Assessment	
Child assessment and developmental screening (such as DRDP, Ages and Stages Questionnaire)	☐
Understanding scores on ECERS/FCCRS/ITERS or help to improve these scores	☐
Understanding scores on CLASS or help to improve these scores	☐
Program Improvement Support	
Family engagement	☐
Accreditation	☐
Business practices, program management, and/or fiscal management	☐
Licensing issues	☐
Health and safety	☐
Other (please specify):	☐

DR41. Did you personally receive or do you expect to receive any financial incentives, such as scholarships or stipends, to promote your individual participation in quality improvement efforts between July 2014 and June 2015 (12 months)?

- ☐ Yes
- ☐ No *[skip to question DR43]*
- ☐ Don't know or don't care to answer *[skip to question DR43]*

DR42. About how much was the financial incentive you personally received or expect to receive from July 2014 through June 2015? (Please note: This does not include any incentive provided to your site as a whole.)
(Please enter a number without commas or a dollar sign. For example, if you received $1,200 you would enter 1200.)

$_____

DR43. What types of quality improvement efforts did these personal financial incentives cover from July 2014 through June 2015?
(Please select all that apply.)

- ☐ Coaching/mentoring
- ☐ Noncredit courses, seminars, workshops, or training programs
- ☐ Credit-bearing college or university courses
- ☐ Formal peer support activities
- ☐ Other (please specify): _____

OTHER CHARACTERISTICS *[Centers only for this section – FCCHs asked in staff survey.]*

Finally, we have a few additional questions about your own background.

DR44. Are you of Hispanic or Latino origin?

- ☐ Yes
- ☐ No
- ☐ Don't Know

DR45. What is your race?

(Select all that apply.)

a. White (Caucasian)
b. Black or African American
c. Asian
d. American Indian, Alaska Native
e. Native Hawaiian
f. Other Pacific Islander
g. Other (specify)
h. Don't Know

DR46. What is your age?

a. Under 20
b. 20-29
c. 30-39
d. 40-49
e. 50-59
f. 60 or over

DR47. What is your primary language?

a. English
b. Spanish
c. A language other than English or Spanish

X01. Do you have any other comments about the quality improvement supports you have received or about the QRIS in general that you would like to share with us?

THANK YOU

Thank you very much for completing our survey! We hope you enjoy your Amazon gift card.

We welcome any questions, comments, or suggestions you may have regarding the survey. Please email them to caqrisstudy@rand.org.

Appendix 6B. Director Survey Response Tables

Director and Site Sample Characteristics

Exhibit 6B.1. Consortia Represented by Survey Sites, by Facility Type: All Sites

	Center	FCCH	All
		Percentage	
Consortia			
Alameda	6.7	7.7	6.9
Fresno	3.4	7.7	3.9
Los Angeles Office of Child Care	4.5	23.1	6.9
Los Angeles Universal Preschool (LAUP)	24.7	7.7	22.6
Orange	4.5	0.0	3.9
Sacramento	5.6	38.5	9.8
San Diego	19.1	0.0	16.7
San Francisco	6.7	7.7	6.9
San Joaquin	2.3	0.0	2.0
Santa Clara	10.1	7.7	9.8
Ventura	12.4	0.0	10.8
Number of sites	89	13	102

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

Exhibit 6B.2. Characteristics of Site Directors: All Sites

	All
Measure	Percentage
Age	
Under 20	1.0
20–29	0.0
30–39	16.8
40–49	36.6
50–59	36.6
60 or over	8.9
[Missing]	*1.0*
Race-ethnicity	
Hispanic	45.5
White only	23.2
Black only	13.1
Asian only	7.1
Other only	0.0
Multiracial	11.1
[Missing]	*2.9*
Highest education level	
Some high school	1.0
GED	0.0
High school diploma	2.9
Some college (no degree)	9.8
Associate's degree	13.7
Bachelor's degree	35.3
Some graduate coursework	4.9
Master's degree	30.4
Ed.D., Ph.D., J.D., or other higher degree	2.0
[Missing]	*0.0*
Years as director/supervisor or teacher of children birth to age 5	
Less than 2 years	7.8
2 to 5 years	16.7
6 to 10 years	17.7
11 to 25 years	42.2
26 or more years	15.7
[Missing]	*0.0*
Have a Child Development Site Supervisor Permit	
Yes	49.5
No	48.5
Don't know	2.0
[Missing]	*1.0*

	All
Measure	Percentage
Have a Child Development Director Permit	
Yes	39.4
No	58.6
Don't know	2.0
[Missing]	*2.9*
Current college degree enrollment	
Enrolled in early childhood (EC)-related major	19.8
Enrolled in non-EC-related major	3.0
Enrolled, no major decided	0.0
Not enrolled	77.2
[Missing]	*1.0*
Primary language	
English	79.2
Spanish	17.8
A language other than English or Spanish	3.0
[Missing]	*1.0*
Number of sites	102

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Includes center and FCCH sites. Percentage distributions are computed for nonmissing cases and may not sum to 100 because of rounding. The percentage of missing cases is shown for each measure for reference.

Exhibit 6B.3. Years as a Director/Supervisor or Teacher of Children Birth to Age 5: All Sites

	All
Measure	Years
Mean	14.6
Median	13.0
Standard Deviation	10.0
Minimum	0.75
Maximum	38.0
Number of sites	102

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Percentages calculated based on nonmissing cases. Number of missing responses is one count.

Exhibit 6B.4. Characteristics of Sites: All Sites

	All
Measure	Percentage
Site's current RTT-ELC QRIS rating	
Tier 1	1.0
Tier 2	4.9
Tier 3	14.7
Tier 4	32.4
Tier 5	11.8
Not yet rated	8.8
Don't know	26.5
[Missing]	*0.0*
Percentage of children who speak a language other than English	
0–25%	27.5
26–50%	16.7
51–75%	22.6
76–100%	33.3
[Missing]	*0.0*
Percentage of children receiving free or reduced-fee care	
0–25%	14.9
26–50%	4.0
51–75%	9.9
76–100%	71.3
[Missing]	*1.0*
Number of sites	102

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Includes center and FCCH sites. Percentage distributions are computed for nonmissing cases and may not sum to 100 because of rounding. The percentage of missing cases is shown for each measure for reference.

Exhibit 6B.5. Participation in RTT-ELC QRIS and Family or Public Awareness: All Sites

Measure	All
	Percentage
Decision to participate in the RTT-ELC QRIS	
To improve the quality of our program	82.2
To gain new ideas for our program	61.4
To get the technical assistance that the RTT-ELC QRIS offers	47.5
To attract and retain qualified staff	37.6
To make our program more attractive to parents	36.6
To get the grants and other financial incentives that the RTT-ELC QRIS offers	34.7
To gain more professional recognition	31.7
Our site was expected to participate	30.7
To increase our business	18.8
Other	4.0
Don't know	3.0
Family/public awareness efforts	
We mention our involvement to new families when they enroll in or inquire about our program	46.5
We mention our involvement at parent or family engagement events at our site	45.5
We mention our involvement in newsletters sent to parents and families	29.7
We display a poster or sign that says we are part of the QRIS	24.8
We mention our involvement to local elementary schools	21.8
We don't currently engage in family or public awareness efforts about our QRIS involvement	21.8
We note our involvement on our site's website	6.9
Other	5.0
Number of sites	102

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Includes center and FCCH sites. Percentages are calculated based on nonmissing cases. Number of missing responses varies from zero to one counts by item.

Exhibit 6B.6. Financial Benefits Received and Uses of Financial Benefits: All Sites (July 2014–June 2015)

Measure	All
	Percentage
Site received any financial benefits	
Yes	41.6
No	27.7
Don't know/uncertain	30.7
Number of sites	102
Uses of financial benefits from July 2014 to June 2015	
Materials/curriculum purchases	66.7
Staff training/coaching	42.9
Staff bonuses/stipends	23.8
Facilities improvements	23.8
General support for operating costs	16.7
Other	9.5
Don't know/uncertain	9.5
No financial benefits were received in this time period	16.7
Number of sites	42

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Includes center and FCCH sites. Percentages are calculated based on nonmissing cases. Number of missing responses varies from zero to one counts by item.

Perceptions of Tier Advancement

Exhibit 6B.7. Sites Taking Steps to Move Up to Next Tier Level: All Sites

Measure	All
Site is actively taking steps to move up to next tier	
Yes	79.8
No	1.1
Don't know	19.1
Number of sites	90

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Includes center and FCCH sites that did not report a Tier 5 rating. Percentages are calculated based on nonmissing cases. Number of missing responses varies from zero to one counts by item.

Exhibit 6B.8. Barriers to Moving Up to Next Tier Level: All Sites

Measure	Not a Barrier	Minor Barrier	Major Barrier	Not Applicable
	Percentage			
Insufficient funding to increase and or sustain staff or director compensation (salary and benefits) to reward increased education levels	12.9	25.9	56.5	4.7
Completion of required staff education levels	19.8	34.9	41.9	3.5
Insufficient funding to meet standards or education requirements	24.7	32.9	38.8	3.5
Finding the time to complete tasks required for the next level	23.0	42.5	32.2	2.3
Getting the paperwork and documentation in order	37.4	39.8	20.5	2.4
Having to wait months to get the next ECERS, ITERS, FCERS, or CLASS assessment	40.5	38.1	19.1	2.4
Insufficient feedback and support from technical assistance provider	44.6	36.1	16.9	2.4
Preparing for and meeting the required CLASS score	30.6	50.6	14.1	4.7
Completion of required annual staff professional development training	52.9	35.3	8.2	3.5
Preparing for and meeting the required ECERS, ITERS, or FCERS score	44.2	46.5	7.0	2.3
Other	25.9	7.4	7.4	59.3
Number of sites	90			

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Includes center and FCCH sites. Percentages are calculated based on nonmissing cases. Number of missing responses varies from three to seven by item except for "Other," which had 63 missing responses. Examples of responses for "Other" include "Staff recruitment" and "Compensation for quality staff and time for planning." Sites with self-reported Tier 5 ratings were not asked this question.

Exhibit 6B.9. RTT-ELC QRIS Rating Elements That Are Especially Easy or Difficult to Attain: All Sites

Measure	Difficult to Attain	Easy to Attain
	Percentage	
Centers (*N*=89)		
Ratios and group size	19.8	55.3
Director qualifications	18.5	37.7
All sites (*N*=102)		
Child observation	21.5	64.3
Developmental and health screenings	22.6	50.0
Minimum qualifications for lead teacher/family child care home (FCCH)	16.1	37.8
Effective teacher-child interactions: CLASS assessments	32.3	36.7
Program environment rating scale (ECERS-R, ITERS-R, FCCERS-R)	17.2	43.9
Don't know/uncertain	25.8	15.3

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Includes center and FCCH sites. The first two elements listed apply only to centers, so FCCH respondents did not reply to those. Percentages are calculated based on nonmissing cases. The number of missing responses for the difficult elements varies from eight to nine by element, and the number missing for the easy elements is four for each element. Respondents could select more than one answer within each column.

Site-Level Quality Improvement Support Efforts

Exhibit 6B.10. Familiarity With Program Administration Scale (PAS) and Business Administration Scale (BAS): All Sites

Familiar With PAS and BAS	All
	Percentage
Yes	48.5
No	51.5
Number of sites	102

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Includes center and FCCH sites. Percentages are calculated based on nonmissing cases. Number of missing responses varies from zero to one counts by item. .

Exhibit 6B.11. Completion of Administrative or Site-Level Assessments Within the Last Five Years: All Sites

Measure	All
	Percentage
Centers (*N*=89)	
Assessment using the Office of Head Start monitoring protocols	36.5
NAEYC accreditation self-study	4.7
FCCHs (*N*=13)	
National Association for Family Child Care accreditation self-study	15.4
All sites (*N*=102)	
PAS or BAS self-assessment and continuous program quality improvement action plan	21.4
Other assessment	1.0
Don't know	19.4
No, our site has not completed a site-level assessment within the last five years	28.6

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Includes center and FCCH sites. Percentages are calculated based on nonmissing cases. Number of missing responses varies from zero to one counts by item.

Exhibit 6B.12. Current National Association for the Education of Young Children (NAEYC) Accreditation Status: Centers

Currently NAEYC Accredited	Center only
	Percentage
Yes	11.8
No	88.2
Number of sites	89

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Percentages are calculated based on nonmissing cases. Number of missing is four counts.

Exhibit 6B.13. Familiarity With California Department of Education's Infant/Toddler and Preschool Learning Foundations and Curriculum Frameworks: All Sites

Infant/Toddler and Preschool Learning Foundations and Curriculum Frameworks	All
	Percentage
Director has never heard of these	2.9
Director is somewhat familiar but site has not really used them	22.6
Site uses them to guide instructional practice or curriculum selection	74.5
Number of sites	102

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: No missing responses.

Exhibit 6B.14. Minimum Hours Required for Professional Development for Staff: Centers

Measure	Center Only
	Percentage
Participation in professional development is required for a minimum number of hours per year:	
Lead teachers have requirements	78.7
Assistant teachers have requirements	62.9
Site administrators have requirements	64.0
No minimum hours required for staff	19.1
Number of sites	89

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: No missing responses.

Exhibit 6B.15. Site Required Staff Participation in Professional Development Activities by Types: Centers

Activity	All Teaching Staff Required	Some Teaching Staff Required	No Teaching Staff Required	Don't Know
		Percentage		
Coaching or mentoring supports	64.8	22.7	8.0	4.6
Noncredit workshops or training	65.2	18.0	9.0	7.9
Credit-bearing courses	17.1	45.5	26.1	11.4
Peer support activities	36.4	29.6	23.9	10.2
Number of sites		89		

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Percentages are calculated based on nonmissing cases. Number of missing responses varies by zero to one counts by item.

Exhibit 6B.16. Perception of Most Helpful Professional Development Activity to Improve Teacher Effectiveness: Centers

Activity	Center Only
	Percentage
Coaching/mentoring	74.2
Noncredit workshops or training	18.0
Credit-bearing courses	2.3
Formal peer support activities	5.6
Number of sites	89

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: No missing responses.

Exhibit 6B.17. Supports Offered to Encourage Participation in Quality Improvement Activities: Centers

Support	Center Only
	Percentage
Classroom materials	80.5
[Missing]	*13.5*
Substitute teacher provided	74.4
[Missing]	*3.4*
Paid time off	58.7
[Missing]	*15.7*
Funds to help cover travel costs	55.9
[Missing]	*23.6*
Bonuses or stipends	54.1
[Missing]	*16.9*
Tuition support	39.7
[Missing]	*29.2*
Other	17.4
[Missing]	*74.2*
Number of sites	89

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Percentages are calculated based on nonmissing cases for each item. The percentage of missing cases is shown for each measure for reference.

Exhibit 6B.18. Practices and Resources to Encourage Improved Classroom Instruction: Centers

Measure	Center Only
	Percentage
Which practices are used to encourage using knowledge gained from professional development or quality improvement activities?	
Encourage teachers to try out new ideas in their classrooms	96.6
Periodically observe classrooms to ensure that staff are implementing new knowledge as intended	95.5
Check in with staff to make sure they have resources to implement new knowledge in the classroom	88.8
Encourage teachers to work in teams with other staff to put new knowledge into practice	82.0
Encourage teachers to discuss new ideas with their coach before implementing them in the classroom	76.4
Encourage coaches/supervisors to mentor staff on how to implement new knowledge and practices	76.4
Set aside time for teachers to share knowledge with other teachers	70.8
Provide teachers planning time to turn new ideas into classroom practice	70.8
Other	6.7
What resources are available to staff to encourage discussion and adoption of new classroom practices?	
Classroom materials	91.0
Planning time	82.0
Teacher support staff, such as coaches	78.8
Teacher teams that review new practices and develop implementation plans	38.2
Release time	31.5
No specific resources such as the ones listed above are available	2.3
Other	0.0
Number of sites	89

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: No missing responses.

Exhibit 6B.19. Importance of Considerations When Supporting Changes to Classroom Instruction: Centers

Measure	Not Important	Somewhat Important	Very Important
		Percentage	
New practices cannot be successfully implemented without adequate training	0.0	12.8	87.2
New practices cannot be successfully implemented without ongoing self-assessment, monitoring, and instructional coaching	0.0	14.8	85.2
Classroom practice should be fairly similar across classrooms that serve children of the same age	3.4	27.0	69.7
Short-term professional development activities may not adequately prepare staff to implement new practices	4.7	27.9	67.4
Staying true to our curriculum: new practices have to be examined before they are implemented to make sure they don't weaken the curriculum	4.6	28.4	67.1
Staff may lack the skills to implement new knowledge on their own without supervision or support	2.3	31.8	65.9
Number of sites		89	

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Percentages are calculated based on nonmissing cases. Number of missing responses varies from zero to three counts by item.

Director Quality Improvement Supports

Exhibit 6B.20. Type of Personal Quality Improvement Support Received by Site Director to Improve Practice and Program Quality: Centers (June 2014–March 2015)

Measure	Center Only
	Percentage
Coaching and mentoring	81.2
Noncredit workshops and training	89.9
Credit-bearing courses	19.5
Formal peer support	80.0
Number of sties	89

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Percentages are calculated based on nonmissing cases. Number of missing responses varies from zero to four counts by item.

Exhibit 6B.21. Dosage of Personal Quality Improvement Supports: Centers (June 2014–March 2015)

Measure	None	8 Hours or Less	9–24 hours	25–40 Hours	More Than 40 Hours
			Percentage		
Coaching and mentoring	18.8	22.4	37.7	17.7	3.5
Noncredit workshops and training	10.1	12.4	30.3	34.8	12.4
Formal peer support	20.0	35.3	28.2	14.1	2.4
Number of sties			89		

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Percentages are calculated based on nonmissing cases. Number of missing responses varies from zero to four counts by item.

Exhibit 6B.22. Quality Improvement Support Content Areas Addressed: Centers (June 2014–March 2015)

Measure	Center Only
	Percentage
Social and emotional development	75.6
Language development/literacy	74.4
Child assessment and developmental screening (such as the Desired Results Developmental Profile, Ages and Stages Questionnaire)	68.6
Teacher-child interactions	64.0
Math/cognitive development	59.3
Family engagement	58.1
Health and safety	58.1
California Preschool Learning Foundations and Frameworks	53.5
Understanding scores on CLASS or help to improve these scores	53.5
Materials and learning environment	48.8
Physical development and health	43.0
Understanding scores on ECERS/FCCRS/ITERS or help to improve these scores	43.0
English language development (for dual language learners)	41.9
Classroom management	41.9
Child behavior management	40.7
Subjects other than language development or math, such as science or music	32.6
Special needs or inclusion	32.6
A specific curriculum	27.9
Business practices, program management, and/or fiscal management	22.1
Cultural/language diversity	20.9
Licensing issues	19.8
Relationship-based practices with infants and toddlers	12.8
Accreditation	11.6
Other	3.5
Number of sites	89

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Percentages are calculated based on nonmissing cases. Number of missing responses is three counts. Responses for "Other" include "Leadership" and "Teaching Pyramid."

Exhibit 6B.23. Financial Incentives Received to Promote Individual Participation in Quality Improvement Efforts: Centers (July 2014–June 2015)

Measure	Center Only
	Percentage
Yes	15.7
No	76.4
Don't know or don't care to answer	7.9
Number of sites	89

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: No missing responses.

Exhibit 6B.24. Amount of Financial Incentives Received to Promote Individual Participation in Quality Improvement Efforts: Centers (July 2014–June 2015)

Measure	Center Only
	Dollars
Mean	1,288
Median	850
Standard deviation	1,241
Minimum	50
Maximum	3,300
Number of sites	14

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Dollar amounts are calculated based on nonmissing cases. Number of missing responses is four counts.

Exhibit 6B.25. Quality Improvement Efforts Covered by Financial Incentives: Centers (June 2014–March 2015)

Measure	Center Only
	Percentage
Coaching/mentoring	38.5
Noncredit workshops or training	38.5
Credit-bearing college or university courses	61.5
Formal peer support activities	7.7
Other	7.7
Number of sites	14

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Percentages are calculated based on nonmissing cases. Number of missing responses is one count.

Additional Site Background Not Reported in Chapter X

Exhibit 6B.26. Percentage of Teaching Staff That Have Left and Been Replaced: All Sites

Measure	All
	Percentage
None have left and been replaced	32.4
1–10%	47.1
11–20%	6.9
21–30%	3.9
31–40%	3.9
41–50%	2.9
More than 50%	2.9
Number of sites	102

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: No missing responses.

Exhibit 6B.27. Reasons for Staff Leaving Site: All Sites

Measure	All
	Percentage
Wage was too low	40.3
Moved to another early childhood position	35.8
Retired	19.4
Requirements for additional education were too high or difficult to achieve	17.9
Moved away from area	17.9
Did not get along with other site staff	11.9
Benefits were not sufficient (e.g., health insurance, paid sick days)	9.0
Staff did not want to participate in program quality assessments (such as ERS or CLASS)	3.0
Requirements for annual professional development training were too high	1.5
Other	19.4
Number of sites	69

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Percentages are calculated based on nonmissing cases. Number of missing responses is two counts.

Exhibit 6B.28. Quality of New Staff: All Sites

Measure	All
	Percentage
More qualified than the staff who left	34.3
About as qualified as the staff who left	52.2
Less qualified than the staff who left	9.0
Don't know/unable to tell	4.5
Number of sites	69

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Percentages are calculated based on nonmissing cases. Number of missing responses is two counts.

Exhibit 6B.29. Curriculum Used and Followed by Staff: All Sites

Measure	All
	Percentage
Bank Street	1.2
Bright Beginnings	0.0
Bright Horizons/The World at Their Fingertips	0.0
Building Blocks	2.3
Creating Child-Centered Classrooms: Step by Step	0.0
Creative Curriculum	54.0
Core Knowledge	1.2
Curiosity Corner	0.0
DLM Early Childhood Express	3.5
Doors to Discovery	0.0
Early Literacy and Learning Model (ELLM)	0.0
HighReach	0.0
HighScope	11.5
Houghton-Mifflin PRE-K	5.8
InvestiGator Club	0.0
Letter People	2.3
Literacy Express	0.0
Little Treasures	0.0
Mathematics Their Way	3.5
Montessori	2.3
Opening the World of Learning (OWL)	4.6
PASSPORTS	0.0
Preschool Sequence	0.0
Project Construct	1.2
Ready, Set, Leap!	0.0
Reggio Emilia	8.1
Saxon Early Learning	0.0
Scholastic Curriculum	3.5
Tools of the Mind	0.0
Waldorf	0.0
We Can	0.0
Wright Skills/Growing with Mathematics	6.9
A faith-based curriculum	1.2
A locally developed curriculum	13.8
Other	19.5
Number of sites	89

SOURCE: Authors' analysis of the 2015 California QRIS Study Director Survey.

NOTE: Percentages are calculated based on nonmissing cases. Number of missing responses is two counts. Examples of responses for "Other" include Growing with Math, Second Step, and Early Sprouts.

Appendix 7A. Detailed Tables for Analyses of QI Participation, Quality, and Child Outcomes

Multiple Regression Results Examining the Relationship Between QI and Program Quality Outcomes

Exhibit 7A.1. Relationship Between Participation in Quality Improvement Activities and Pre-K CLASS Scores in Spring 2015, With and Without Controlling for Incentives and Prior Quality Improvement Activities, Among Teachers in Centers

	Pre-K CLASS Scores, Spring 2015					
	Emotional Support		Classroom Organization		Instructional Support	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Quality improvement activities in current year, 2014–15						
Teacher participated in peer support in 2014–15	0.29*	0.20	0.40*	0.11	0.65**	0.44‡
Teacher participated in training in 2014–15	0.11	0.09	0.20	0.11	0.04	-0.03
Teacher participated in coaching in 2014–15	-0.03	0.04	-0.33	-0.02	-0.31	-0.15
Teacher participated in credit-bearing early childhood education (ECE) courses in 2014–15	-0.08	-0.18	-0.21	-0.38	0.02	-0.11
CLASS scores in teacher's classroom in previous year, 2013–14						
Emotional support score, 2013–14	0.26*	0.24				
Classroom organization score, 2013–14			0.36**	0.50***		
Instructional support score, 2013–14					0.08	0.16
Teacher and program characteristics in current year, 2014–15						
Years of ECE teaching experience	-0.01*	-0.01	-0.01	0.00	-0.01	0.00
Teacher has at least a Bachelor's degree	0.06	0.08	0.03	0.06	0.49**	0.51**
English is not teacher's primary language	0.09	0.09	0.12	0.07	-0.17	-0.18
Teacher is White, non-Hispanic	-0.02	-0.01	-0.19	-0.16	-0.09	-0.05
Teaches in a program rated a 4 or 5	0.11	0.15	0.05	0.14	0.36‡	0.48*
Teaches in a program with standards-based funding	-0.18	-0.12	-0.05	0.01	-1.10**	-0.95**
Received a financial incentive for quality improvement		-0.15		-0.56**		-0.60*

	Pre-K CLASS Scores, Spring 2015					
	Emotional Support		Classroom Organization		Instructional Support	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Quality improvement activities in previous year, 2013–14						
Teacher participated in peer support in 2013–14		0.22		0.85*		0.43
Teacher participated in training in 2013–14		-0.06		-0.12		-0.14
Teacher participated in coaching in 2013–14		-0.04		-0.48		0.25
Teacher participated in credit-bearing ECE courses in 2013–14		0.13		0.09		0.11
Model R^2	0.12	0.14	0.19	0.29	0.16	0.22

$p < .10$, * $p < .05$; ** $p < .01$; *** $p < .001$. $N = 147$ teachers in 98 programs. Models use full-information maximum likelihood estimation (to account for missing data) with cluster-robust standard errors (to account for the clustering of teachers in programs). The CLASS scores included in these models are transformed (log 10 or square root transformation) to normalize the regression residuals; the regression coefficients presented in the table have been retransformed so they can be interpreted as the average change in the raw CLASS score for each one-unit change in the predictor variable, holding all other variables in the model constant. Note that the coefficients for years of teaching represent the average increase in CLASS score for each extra year of teaching experience, but a single year might not make a very big difference in CLASS scores, and these coefficients are very small even when significant.

Exhibit 7A.2. Relationship Between Participation in Quality Improvement Activities and Pre-K CLASS Scores in Spring 2015, With and Without Controlling for Incentives and Prior Quality Improvement Activities, Among Teachers in Centers and FCCHs

	Pre-K CLASS Scores, Spring 2015					
	Emotional Support		Classroom Organization		Instructional Support	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Quality improvement activities in current year, 2014–15						
Teacher participated in peer support in 2014–15	0.29*	0.19	0.39*	0.19	0.62**	0.45‡
Teacher participated in training in 2014–15	0.11	0.10	0.20	0.16	0.04	0.01
Teacher participated in coaching in 2014–15	-0.03	0.03	-0.34	-0.09	-0.28	-0.17
Teacher participated in credit-bearing ECE courses in 2014–15	-0.04	-0.10	-0.16	-0.22	0.16	0.08
CLASS scores in teacher's classroom in previous year, 2013–14						
Emotional support score, 2013–14	0.26*	0.25‡				
Classroom organization score, 2013–14			0.37**	0.46***		
Instructional support score, 2013–14					0.13	0.17
Teacher and program characteristics in current year, 2014–15						
Years of ECE teaching experience	-0.01*	-0.01‡	-0.01‡	-0.01	-0.01	0.00
Teacher has at least a Bachelor's degree	0.05	0.05	0.03	0.02	0.42*	0.41*
English is not teacher's primary language	0.07	0.07	0.10	0.03	-0.19	-0.22
Teacher is White, non-Hispanic	0.02	0.01	-0.22	-0.24	-0.07	-0.08
Teaches in a program rated a 4 or 5	0.11	0.13	0.10	0.11	0.34	0.39‡
Teaches in a program with standards-based funding	-0.01	-0.02	0.05	0.01	-0.63‡	-0.67*
Received a financial incentive for quality improvement in 2014–15		-0.12		-0.41*		-0.45*

	Pre-K CLASS Scores, Spring 2015					
	Emotional Support		Classroom Organization		Instructional Support	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Quality improvement activities in previous year, 2013–14						
Teacher participated in peer support in 2013–14		0.24		0.66*		0.36
Teacher participated in training in 2013–14		-0.13		-0.17		-0.23
Teacher participated in coaching in 2013–14		-0.03		-0.44		0.29
Teacher participated in credit-bearing ECE courses in 2013–14		0.13		0.13		0.18
Model R^2	0.11	0.14	0.21	0.29	0.13	0.18

‡ $p < .10$, * $p < .05$; ** $p < .01$; *** $p < .001$. N = 161 teachers in 112 programs

Models use full-information maximum likelihood estimation (to account for missing data) with cluster-robust standard errors (to account for the clustering of teachers in programs). The CLASS scores included in these models are transformed (log 10 or square root transformation) to normalize the regression residuals; the regression coefficients have been retransformed so they can be interpreted as the average change in the raw CLASS score for each one-unit change in the predictor variable.

Exhibit 7A.3. Relationship Between Dosage of Quality Improvement Activities and Pre-K CLASS Scores in Spring 2015, With and Without Controlling for Incentives and Prior Quality Improvement Activities, Among Teachers in Centers

	Pre-K CLASS Scores, Spring 2015					
	Emotional Support		Classroom Organization		Instructional Support	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Dosage of quality improvement activities in current year, 2014–15						
Hours of peer support reported by teacher over 10 months	0.00 (0.08)	0.00 (0.03)	0.01 (0.10)	0.00 (-0.02)	0.00 (0.06)	0.00 (-0.02)
Hours of training reported by teacher over 10 months	0.00 (0.02)	0.00 (0.00)	0.00 (-0.11)	-0.01 (-0.18)	0.00 (0.07)	0.00 (0.00)
Hours of coaching reported by teacher over 10 months	0.00 (0.08)	0.00 (0.08)	0.01 (0.19)‡	0.01 (0.29)*	0.00 (0.12)‡	0.00 (0.11)
CLASS scores in teacher's classroom in previous year, 2013–14						
Emotional support score, 2013–14	0.18	0.20				
Classroom organization score, 2013–14			0.37**	0.54		
Instructional support score, 2013–14					0.08	0.19
Teacher and program characteristics in current year, 2014–15						
Years of ECE teaching experience	-0.01*	-0.01‡	-0.01‡	-0.01	-0.01	-0.01
Teacher has at least a Bachelor's degree	0.01	0.01	0.00	-0.01	0.44*	0.42*
English is not teacher's primary language	0.09	0.09	0.10	0.06	-0.13	-0.16
Teacher is White, non-Hispanic	-0.02	-0.01	-0.18	-0.18	-0.05	0.00
Teaches in a program rated a 4 or 5	0.12	0.13	0.05	0.10	0.41‡	0.49*
Teaches in a program with standards-based funding	-0.12	-0.11	0.05	-0.01	-1.12**	-1.00**
Received a financial incentive for quality improvement in 2014–15		-0.11		-0.49*		-0.59*

	Pre-K CLASS Scores, Spring 2015					
	Emotional Support		Classroom Organization		Instructional Support	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Quality improvement activities in previous year, 2013–14						
Teacher participated in peer support in 2013–14		0.25		0.87**		0.66*
Teacher participated in training in 2013–14		-0.07		-0.03		-0.08
Teacher participated in coaching in 2013–14		0.01		-0.53‡		0.21
Teacher participated in credit-bearing ECE courses in 2013–14		-0.01		-0.19		-0.13
Model R^2	0.08	0.10	0.16	0.27	0.13	0.20

‡ $p < .10$, * $p < .05$; ** $p < .01$; *** $p < .001$. N = 147 teachers in 98 programs

Models use full-information maximum likelihood estimation (to account for missing data) with cluster-robust standard errors (to account for the clustering of teachers in programs). The CLASS scores included in these models are transformed (log 10 or square root transformation) to normalize the regression residuals; the regression coefficients have been retransformed so they can be interpreted as the average change in the raw CLASS score for each one-unit change in the predictor variable. For the dosage of quality improvement activities, the coefficients are presented with unstandardized coefficients followed by standardized coefficients in parentheses. The standardized coefficients represent change in standard deviation units, leading to a larger coefficient in most cases. The standard deviations are 28.57 for training, 32.38 for coaching, and 17.32 for peer support.

Exhibit 7A.4. Relationship Between Dosage of Quality Improvement Activities and Pre-K CLASS Scores in Spring 2015, With and Without Controlling for Incentives and Prior Quality Improvement Activities, Among Teachers in Centers and FCCHs

	Pre-K CLASS Scores, Spring 2015					
	Emotional Support		Classroom Organization		Instructional Support	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Dosage of quality improvement activities in current year, 2014–15						
Hours of peer support reported by teacher over 10 months	0.00 (0.08)	0.00 (0.04)	0.01 (0.11)	0.00 (0.02)	0.00 (0.04)	0.00 (0.00)
Hours of training reported by teacher over 10 months	0.00 (0.04)	0.00 (0.02)	0.00 (-0.07)	0.00 (-0.13)	0.00 (0.10)	0.00 (0.07)
Hours of coaching reported by teacher over 10 months	0.00 (0.12)‡	0.00 (0.11)	0.01 (0.17)‡	0.01 (0.27)*	0.00 (0.11)‡	0.00 0.10)
CLASS scores in teacher's classroom in previous year, 2013–14						
Emotional support score, 2013–14	0.20	0.21				
Classroom organization score, 2013–14			0.37**	0.51***		
Instructional support score, 2013–14					0.10	0.15
Teacher and program characteristics in current year, 2014–15						
Years of ECE teaching experience	-0.01‡	-0.01	-0.01‡	-0.01	0.00	0.00
Teacher has at least a Bachelor's degree	0.02	0.01	0.04	-0.01	0.38*	0.36*
English is not teacher's primary language	0.09	0.07	0.10	0.04	-0.13	-0.18
Teacher is White, non-Hispanic	0.02	0.02	-0.19	-0.24	0.01	0.00
Teaches in a program rated a 4 or 5	0.13	0.13	0.13	0.12	0.40‡	0.43*
Teaches in a program with standards-based funding	0.02	0.00	0.08	-0.01	-0.69*	-0.71*
Received a financial incentive for quality improvement in 2014–15		-0.10		-0.41*		-0.42*

	Pre-K CLASS Scores, Spring 2015					
	Emotional Support		Classroom Organization		Instructional Support	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Quality improvement activities in previous year, 2013–14						
Teacher participated in peer support in 2013–14		0.29		0.78**		0.50‡
Teacher participated in training in 2013–14		-0.12		-0.07		-0.17
Teacher participated in coaching in 2013–14		0.00		-0.54‡		0.26
Teacher participated in credit-bearing ECE courses in 2013–14		0.02		-0.09		0.07
Model R^2	0.08	0.11	0.18	0.29	0.10	0.16

‡ $p < .10$, * $p < .05$; ** $p < .01$; *** $p < .001$. N = 161 teachers in 112 programs

Models use full-information maximum likelihood estimation (to account for missing data) with cluster-robust standard errors (to account for the clustering of teachers in programs). The CLASS scores included in these models are transformed (log 10 or square root transformation) to normalize the regression residuals; the regression coefficients have been retransformed so they can be interpreted as the average change in the raw CLASS score for each one-unit change in the predictor variable. For the dosage of quality improvement activities, the coefficients are presented with unstandardized coefficients followed by standardized coefficients in parentheses. The standardized coefficients represent change in standard deviation units, leading to a larger coefficient in most cases. The standard deviations are 27.90 for training, 32.09 for coaching, and 17.61 for peer support.

Exhibit 7A.5. Relationship Between Participation in Sustained Coaching and Pre-K CLASS Scores in Spring 2015, With and Without Controlling for Incentives and Prior Quality Improvement Activities, Among Teachers in Centers

	Pre-K CLASS Scores, Spring 2015					
	Emotional Support		Classroom Organization		Instructional Support	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Participation in sustained coaching, 2014–15						
Received at least 2 hours of coaching per month, 7 of 10 months	0.25*	0.23‡	0.11	0.03	0.23	0.06
CLASS scores in teacher's classroom in previous year, 2013–14						
Emotional support score, 2013–14	0.18	0.21				
Classroom organization score, 2013–14			0.35**	0.53***		
Instructional support score, 2013–14					0.09	0.25‡
Teacher and program characteristics in current year, 2014–15						
Years of ECE teaching experience	-0.01‡	-0.01	-0.01	-0.01	0.00	0.00
Teacher has at least a Bachelor's degree	-0.03	-0.01	-0.05	-0.05	0.37*	0.39*
English is not teacher's primary language	0.11	0.09	0.12	0.04	-0.13	-0.19
Teacher is White, non-Hispanic	-0.05	-0.03	-0.19	-0.19	-0.07	-0.04
Teaches in a program rated a 4 or 5	0.09	0.11	0.04	0.06	0.36	0.44*
Teaches in a program with standards-based funding	-0.14	-0.11	-0.03	-0.06	-1.17***	-1.06***
Received a financial incentive for quality improvement in 2014–15		-0.17		-0.50**		-0.60*

	Pre-K CLASS Scores, Spring 2015					
	Emotional Support		Classroom Organization		Instructional Support	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Quality improvement activities in previous year, 2013–14						
Teacher participated in peer support in 2013–14		0.28		0.96***		0.67*
Teacher participated in training in 2013–14		-0.12		-0.27		-0.27
Teacher participated in coaching in 2013–14		0.00		-0.42		0.28
Teacher participated in credit-bearing ECE courses in 2013–14		-0.01		-0.15		-0.04
Model R^2	0.09	0.12	0.13	0.28	0.11	0.20

‡ $p < .10$, * $p < .05$; ** $p < .01$; *** $p < .001$. N = 147 teachers in 98 programs

Models use full-information maximum likelihood estimation (to account for missing data) with cluster-robust standard errors (to account for the clustering of teachers in programs). The CLASS scores included in these models are transformed (log 10 or square root transformation) to normalize the regression residuals; the regression coefficients have been retransformed so they can be interpreted as the average change in the raw CLASS score for each one-unit change in the predictor variable.

Exhibit 7A.6. Relationship Between Participation in Sustained Coaching and Pre-K CLASS Scores in Spring 2015, With and Without Controlling for Incentives and Prior Quality Improvement Activities, Among Teachers in Centers and FCCHs

	Pre-K CLASS Scores, Spring 2015					
	Emotional Support		Classroom Organization		Instructional Support	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Participation in sustained coaching, 2014–15						
Received at least 2 hours of coaching per month, 7 of 10 months	0.26*	0.24*	0.10	0.06	0.17	0.01
CLASS scores in teacher's classroom in previous year, 2013–14						
Emotional support score, 2013–14	0.19	0.22				
Classroom organization score, 2013–14			0.36**	0.49***		
Instructional support score, 2013–14					0.12	0.23‡
Teacher and program characteristics in current year, 2014–15						
Years of ECE teaching experience	-0.01‡	-0.01	-0.01	-0.01	0.00	0.00
Teacher has at least a Bachelor's degree	-0.02	-0.02	-0.01	-0.06	0.33‡	0.33‡
English is not teacher's primary language	0.11	0.08	0.11	0.02	-0.15	-0.20
Teacher is White, non-Hispanic	-0.01	-0.02	-0.22	-0.26	-0.03	-0.06
Teaches in a program rated a 4 or 5	0.10	0.10	0.09	0.06	0.35	0.37‡
Teaches in a program with standards-based funding	0.00	-0.01	0.02	-0.03	-0.76*	-0.79*
Received a financial incentive for quality improvement in 2014–15		-0.15		-0.41**		-0.44*

	Pre-K CLASS Scores, Spring 2015					
	Emotional Support		Classroom Organization		Instructional Support	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Quality improvement activities in previous year, 2013–14						
Teacher participated in peer support in 2013–14		0.31		0.81**		0.55‡
Teacher participated in training in 2013–14		-0.16		-0.26		-0.33
Teacher participated in coaching in 2013–14		-0.02		-0.41		0.31
Teacher participated in credit-bearing ECE courses in 2013–14		0.02		-0.05		0.14
Model R^2	0.09	0.13	0.15	0.28	0.08	0.16

‡ $p < .10$, * $p < .05$; ** $p < .01$; *** $p < .001$. N = 161 teachers in 112 programs

Models use full-information maximum likelihood estimation (to account for missing data) with cluster-robust standard errors (to account for the clustering of teachers in programs). The CLASS scores included in these models are transformed (log 10 or square root transformation) to normalize the regression residuals; the regression coefficients have been retransformed so they can be interpreted as the average change in the raw CLASS score for each one-unit change in the predictor variable.

Exhibit 7A.7. Relationship Between Topics Covered in Training and Coaching and Pre-K CLASS Scores in Spring 2015, With and Without Controlling for Incentives and Prior Quality Improvement Activities, Among Teachers in Centers

	Pre-K CLASS Scores, Spring 2015					
	Emotional Support		Classroom Organization		Instructional Support	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Quality improvement topics in current year, 2014–15						
Received training and coaching on teacher-child interactions or understanding or improving CLASS	0.07	0.05	0.05	0.11	-0.04	-0.06
CLASS scores in teacher's classroom in previous year, 2013–14						
Emotional support score, 2013–14	0.18	0.22				
Classroom organization score, 2013–14			0.35**	0.52***		
Instructional support score, 2013–14					0.08	0.18
Teacher and program characteristics in current year, 2014–15						
Years of ECE teaching experience	-0.01*	-0.01‡	-0.01	-0.01	0.00	0.00
Teacher has at least a Bachelor's degree	-0.02	0.00	-0.06	-0.05	0.38*	0.41*
English is not teacher's primary language	0.09	0.07	0.10	0.01	-0.14	-0.20
Teacher is White, non-Hispanic	-0.04	-0.04	-0.19	-0.21	-0.05	-0.03
Teaches in a program rated a 4 or 5	0.10	0.12	0.05	0.06	0.38	0.45*
Teaches in a program with standards-based funding	-0.15	-0.12	-0.02	-0.02	-1.19***	-1.04***
Received a financial incentive for quality improvement in 2014–15		-0.13		-0.53**		-0.56*

	Pre-K CLASS Scores, Spring 2015					
	Emotional Support		Classroom Organization		Instructional Support	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Quality improvement activities in previous year, 2013–14						
Teacher participated in peer support in 2013–14		0.35		0.95***		0.64*
Teacher participated in training in 2013–14		-0.17		-0.27		-0.26
Teacher participated in coaching in 2013–14		0.03		-0.41		0.31
Teacher participated in credit-bearing ECE courses in 2013–14		0.01		-0.15		-0.04
Model R^2	0.07	0.11	0.13	0.28	0.10	0.18

‡ $p < .10$, * $p < .05$; ** $p < .01$; *** $p < .001$. N = 147 teachers in 98 programs

Models use full-information maximum likelihood estimation (to account for missing data) with cluster-robust standard errors (to account for the clustering of teachers in programs). The CLASS scores included in these models are transformed (log 10 or square root transformation) to normalize the regression residuals; the regression coefficients have been retransformed so they can be interpreted as the average change in the raw CLASS score for each one-unit change in the predictor variable.

Exhibit 7A.8. Relationship Between Topics Covered in Training and Coaching and Pre-K CLASS Scores in Spring 2015, With and Without Controlling for Incentives and Prior Quality Improvement Activities, Among Teachers in Centers and FCCHs

	Pre-K CLASS Scores, Spring 2015					
	Emotional Support		Classroom Organization		Instructional Support	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Quality improvement topics in current year, 2014–15						
Received training and coaching on teacher-child interactions or understanding or improving CLASS	0.14	0.11	0.11	0.12	0.04	0.03
CLASS scores in teacher's classroom in previous year, 2013–14						
Emotional support score, 2013–14	0.19	0.23				
Classroom organization score, 2013–14			0.36**	0.48***		
Instructional support score, 2013–14					0.10	0.16
Teacher and program characteristics in current year, 2014–15						
Years of ECE teaching experience	-0.01‡	-0.01	-0.01	-0.01	0.00	0.00
Teacher has at least a Bachelor's degree	-0.02	0.00	-0.02	-0.06	0.34‡	0.35‡
English is not teacher's primary language	0.07	0.05	0.09	0.00	-0.16	-0.21
Teacher is White, non-Hispanic	0.01	-0.01	-0.20	-0.26	0.00	-0.03
Teaches in a program rated a 4 or 5	0.10	0.10	0.09	0.07	0.36	0.38‡
Teaches in a program with standards-based funding	0.01	-0.01	0.04	0.00	-0.76*	-0.76*
Received a financial incentive for quality improvement in 2014–15		-0.12		-0.42*		-0.43*

	Pre-K CLASS Scores, Spring 2015					
	Emotional Support		Classroom Organization		Instructional Support	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Quality improvement activities in previous year, 2013–14						
Teacher participated in peer support in 2013–14		0.35‡		0.80**		0.53‡
Teacher participated in training in 2013–14		-0.21		-0.26		-0.29
Teacher participated in coaching in 2013–14		0.04		-0.39		0.34
Teacher participated in credit-bearing ECE courses in 2013–14		0.05		-0.05		0.12
Model R^2	0.07	0.12	0.15	0.27	0.08	0.15

‡ $p < .10$, * $p < .05$; ** $p < .01$; *** $p < .001$. N = 161 teachers in 112 programs

Models use full-information maximum likelihood estimation (to account for missing data) with cluster-robust standard errors (to account for the clustering of teachers in programs). The CLASS scores included in these models are transformed (log 10 or square root transformation) to normalize the regression residuals; the regression coefficients have been retransformed so they can be interpreted as the average change in the raw CLASS score for each one-unit change in the predictor variable.

Descriptive Comparisons of Toddler and Preschool Teachers in the QI and Classroom Quality Sample

Exhibit 7A.9. Characteristics of Toddler and Preschool Teachers in the QI and Classroom Quality Study Sample, in Centers and FCCHs Combined

Characteristic	Toddler Teachers			Preschool Teachers			*p*-value of chi-square test
	Has Characteristic		*N*	Has Characteristic		*N*	
	Number	Percentage		Number	Percentage		
Teacher and program characteristics in current year, 2014–15							
Teacher has at least a Bachelor's degree	11	44.00	25	86	58.50	147	
English is not teacher's primary language	12	46.15	26	60	40.27	149	
Teacher is White, non-Hispanic	4	15.38	26	25	17.36	144	
Teaches in a center-based program	23	79.31	29	147	91.30	161	‡
Teaches in a program rated a 4 or 5	8	28.57	28	82	52.23	157	*
Teaches in a program with standards-based funding	18	72.00	25	138	92.00	150	**
Received a financial incentive for quality improvement in 2014–15	7	28.00	25	58	38.67	150	
Quality improvement activities in previous year, 2013–14							
Teacher participated in peer support in 2013–14	9	45.00	20	62	59.05	105	
Teacher participated in training in 2013–14	16	69.57	23	105	79.55	132	
Teacher participated in coaching in 2013–14	15	68.18	22	104	75.36	138	
Teacher participated in credit-bearing ECE courses in 2013–14	5	21.74	23	44	30.56	144	
Characteristic	**Mean**	**Standard Deviation**	***N***	**Mean**	**Standard Deviation**	***N***	***p*-value of *t*- test**
Years of ECE teaching experience	7.54	9.53	26	9.55	10.36	147	

‡ $p < .10$, * $p < .05$; ** $p < .01$; *** $p < .001$.

Exhibit 7A.10. Participation in Quality Improvement Activities and Supports Among Toddler and Preschool Teachers in the QI and Classroom Quality Study Sample, in Centers and FCCHs

Quality Improvement Activity	Toddler Teachers			Preschool Teachers			*p*-value of chi square test
	Participated in Activity		*N*	Participated in Activity		*N*	
	Number	Percentage		Number	Percentage		
Participation in quality improvement activity							
Participated in any peer supports	9	32.14	28	96	61.15	157	**
Participated in any training	20	71.43	28	123	78.85	156	
Participated in any coaching	22	78.57	28	134	85.35	157	
Participated in any credit-bearing coursework on ECE	7	26.92	26	30	20.55	146	
Participation in sustained coaching							
Received at least 2 hours of training 7 out of 10 months	11	47.83	23	91	61.90	147	
Participation in both training and coaching on topics related to classroom interactions							
Received training and coaching on teacher-child interactions or understanding, or improving CLASS scores	11	39.29	28	33	20.50	161	

‡ $p < .10$, * $p < .05$; ** $p < .01$; *** $p < .001$.

Exhibit 7A.11. Participation in Quality Improvement Activities and Supports Among Toddler and Preschool Teachers in the QI and Classroom Quality Study Sample, in Centers and FCCHs

Dosage of Quality Improvement Activity	Toddler Teachers			Preschool Teachers			*p*-value of *t*-test
	Mean	Standard Deviation	*N*	Mean	Standard Deviation	*N*	
Hours of peer support over 10 months	9.96	23.47	27	11.88	17.61	151	
Hours of training over 10 months	20.54	31.74	26	22.65	27.90	154	
Hours of coaching over 10 months	29.27	42.22	28	22.13	32.09	157	

‡ $p < .10$, * $p < .05$; ** $p < .01$; *** $p < .001$.

Descriptive Statistics for the QI and Child Outcomes Analysis Sample (Centers)

Exhibit 7A.12. Characteristics of Preschool Teachers in the QI and Child Outcomes Study Sample, Centers Only

Characteristic	Has Characteristic		*N*
	Number	Percentage	
Teacher and program characteristics in current year, 2014–15			
Teacher has at least a Bachelor's degree	61	58.65	104
English is not teacher's primary language	47	44.76	105
Teacher is White, non-Hispanic	17	16.50	103
Teaches in a program rated a 4 or 5	71	65.74	108
Teaches in a program with standards-based funding	99	91.67	108
Teaches in a program that enrolls private-pay children	17	15.74	108
Teaches in a site that enrolls infants and toddlers	22	20.37	108
Received a financial incentive for quality improvement in 2014–15	40	38.10	105
Quality improvement activities in previous year, 2013–14			
Teacher participated in peer support in 2013–14	51	64.56	79
Teacher participated in training in 2013–14	77	81.05	95
Teacher participated in coaching in 2013–14	78	78.79	99
Teacher participated in credit-bearing courses in 2013–14	26	25.49	102
Characteristic	**Mean**	**Standard Deviation**	***N***
Teacher and program characteristics in current year, 2014–15			
Years of ECE teaching experience	9.08	(9.62)	104
Total enrollment of site where teacher works	62.40	(32.79)	109

Exhibit 7A.13. Participation in Quality Improvement Activities and Supports Among Preschool Teachers in the QI and Child Outcomes Study Sample, Centers Only

Quality Improvement Activity	Participated in Activity		*Total N*
	Number	Percentage	
Participation in quality improvement activity			
Participated in any peer supports	67	62.62	107
Participated in any training	85	79.44	107
Participated in any coaching	92	85.19	108
Participated in any credit-bearing coursework on ECE	19	19.79	96
Participation in sustained coaching			
Received at least 2 hours of training 7 out of 10 months	40	37.04	108
Participation in coaching on content-specific topics			
25%+ coaching time focused on language/literacy	67	62.04	108
25%+ coaching time focused on math/cognitive development	47	43.52	108
25%+ coaching time focused on social emotional development	74	68.52	108

Quality Improvement Activity	Mean	Standard Deviation	*N*
Dosage of quality improvement activity			
Hours of peer support over 10 months	13.06	(17.45)	107
Hours of training over 10 months	24.07	(31.07)	106
Hours of coaching over 10 months	21.05	(34.58)	108

Detailed Regression Tables for Child Outcomes (Centers)

Exhibit 7A.14. Associations Between Teachers' Participation in Quality Improvement (QI) Activities and Child Outcomes, With and Without Controls for Incentives and Prior Quality Improvement Activities, Centers Only

	Child Outcomes, Spring 2015							
	Story and Print Concepts		Peg Tapping Task		Letter Word Identification		Applied Problems	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
2014–15 Program Year								
Training	-0.130	0.072	-0.266	0.037	-0.122‡	-0.026	0.014	0.088
Coaching	-0.348	-0.462*	-0.038	-0.443	0.241**	0.164*	0.058	0.011
ECE courses	-0.885***	-0.974***	0.231	0.015	-0.120	-0.172*	-0.117*	-0.085
Peer support	0.160	0.103	0.469	0.390	-0.023	-0.112	0.010	-0.031
Financial incentive		-0.032		-0.117		0.039		0.099*
2013–14 Program Year								
Training		-0.471		-0.169		-0.353**		-0.225**
Coaching		0.569*		1.422**		0.370**		0.062
ECE courses		0.530***		0.079		0.287**		0.056
Peer support		-0.177		-0.971*		0.044		0.141‡
Teacher Characteristics								
Years of ECE experience	-0.001	0.003	0.017	0.015	-0.003	0.000	0.004	0.005*
Has Bachelor's degree	0.343‡	0.373*	0.757*	1.022***	0.156*	0.138*	0.067	0.036
Non-native English speaker	0.232‡	0.248*	-0.216	-0.297	0.009	-0.002	-0.006	-0.002
White, non-Hispanic	0.476**	0.377*	-1.301**	-1.394**	0.019	-0.044	0.005	-0.004
Site Characteristics								
Program rated a 4 or 5	0.231	0.125	-0.388	-0.475	0.157*	0.065	-0.006	-0.058
Standards-based funding	-0.420	-0.480	1.144	0.913	0.063	0.106	0.253*	0.286*
Private-pay children	0.239	0.087	0.462	0.151	0.143	0.053	0.147	0.113

	Child Outcomes, Spring 2015							
	Story and Print Concepts		Peg Tapping Task		Letter Word Identification		Applied Problems	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Total site enrollment	-0.003	-0.002	0.000	0.001	-0.001	0.000	-0.001*	-0.001
Toddlers and Infants enrolled	-0.173	-0.434	-0.504	-0.624	0.020	-0.176	-0.035	-0.097
Child Characteristics								
Male	-0.219*	-0.209*	0.015	0.046	-0.091‡	-0.086‡	-0.022	-0.022
Special needs	-0.423*	-0.413*	-0.908‡	-1.002*	-0.182*	-0.179*	-0.133‡	-0.129‡
Spanish home language	0.528***	0.503***	0.471	0.448	-0.009	-0.029	0.092	0.082
Eng./Spanish home language	0.221	0.185	-0.224	-0.301	-0.068	-0.091‡	-0.022	-0.037
Other home language	0.322	0.327	-0.281	-0.255	0.367*	0.368*	0.080	0.057
Fall score	0.351***	0.347***	0.432***	0.433***	0.549***	0.533***	0.602***	0.598***
Age at fall assessment	0.739***	0.723***	2.473***	2.444***				
Days between assessments	-0.005	-0.005	-0.017	-0.017	-0.002	-0.003	-0.003	-0.002
preLAS fall score	0.118***	0.117***	0.208***	0.208***	0.036***	0.035***	0.017**	0.017**
Model R^2	0.470	0.479	0.413	0.420	0.555	0.571	0.531	0.538

‡ $p < .10$, * $p < .05$; ** $p < .01$. N = 1,037 to 1,064 children, taught by 108 teachers, in 87 centers.

Models use zero-imputed variables, in which missing values were recoded to zero. The models also include indicators for cases that were recoded. These indicator variables are not shown in the table.

Exhibit 7A.15. Associations Between the Number of Hours of Quality Improvement (QI) Supports Teachers Receive and Child Outcomes, With and Without Controls for Incentives and Prior Quality Improvement Activities, Centers Only

	Child Outcomes, Spring 2015							
	Story and Print Concepts		Peg Tapping Task		Letter Word Identification		Applied Problems	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
2014–15 Program Year								
Hours of training	-0.006**	-0.002	-0.007‡	-0.010*	-0.002**	0.000	0.000	0.001
Hours of coaching	0.003	0.002	0.020**	0.018**	0.004**	0.002**	0.003**	0.002**
Hours of peer support	0.000	-0.001	-0.009	-0.009	-0.001	-0.002	-0.001	-0.001
Financial incentive		0.106		-0.126		0.049		0.090‡
2013–14 Program Year								
Training		-0.814**		-0.044		-0.293*		-0.214*
Coaching		0.420		0.973‡		0.259‡		-0.006
ECE courses		0.257		0.037		0.212**		0.013
Peer support		0.144		-0.613		0.021		0.165*
Teacher Character								
Years of ECE experience	-0.004	-0.002	0.003	0.003	-0.006*	-0.004	0.003	0.003
Has Bachelor's degree	0.357*	0.306‡	0.813**	1.116***	0.184**	0.138*	0.074	0.029
Non-native English speaker	0.123	0.139	-0.131	-0.182	-0.009	-0.022	-0.004	-0.005
White, non-Hispanic	0.227	0.190	-1.314**	-1.397***	-0.043	-0.094	-0.042	-0.030
Site Characteristics								
Program rated a 4 or 5	0.149	0.013	-0.407	-0.381	0.143‡	0.068	-0.005	-0.047
Standards-based funding	-0.245	-0.235	1.228	1.269	0.216	0.157	0.332**	0.345*
Private-pay children	0.189	0.136	0.404	0.270	0.169	0.114	0.184	0.169
Total enrollment	-0.003	-0.002	-0.001	-0.001	-0.001	0.000	-0.001*	-0.001‡
Toddlers and infants enrolled	-0.455	-0.504	-0.519	-0.547	-0.033	-0.252	-0.093	-0.120
Child Characteristics								
Male	-0.215*	-0.218*	0.031	0.041	-0.076	-0.078	-0.021	-0.026

	Child Outcomes, Spring 2015							
	Story and Print Concepts		Peg Tapping Task		Letter Word Identification		Applied Problems	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Special needs	-0.434*	-0.417*	-0.881‡	-0.962‡	-0.186*	-0.185*	-0.132‡	-0.128‡
Spanish home language	0.489	0.495	0.440	0.407	-0.012	-0.027	0.092	0.086
Eng./Spanish home language	0.188	0.173	-0.239	-0.310	-0.076	-0.089	-0.028	-0.032
Other home language	0.316	0.304	-0.331	-0.356	0.392	0.385	0.090	0.064
Fall score	0.350***	0.348*	0.431***	9.754***	0.553***	0.542***	0.595***	0.595***
Age at fall assessment	0.758***	0.743	2.430***	4.759***				
Days between assessment	-0.005	-0.001	-0.018‡	-0.017	-0.002	-0.002	-0.003‡	-0.002
preLAS fall score	0.116***	0.118***	0.209***	0.207***	0.035***	0.035***	0.018**	0.018**
Model R^2	0.452	0.460	0.416	0.422	0.558	0.570	0.533	0.540

‡ $p < .10$, * $p < .05$; ** $p < .01$. N = 1,037 to 1,064 children, taught by 108 teachers, in 87 centers.

Models use zero-imputed variables, in which missing values were recoded to zero. The models also include indicators for cases that were recoded. These indicator variables are not shown in the table.

Exhibit 7A.16. Associations Between Sustained Coaching and Child Outcomes, With and Without Controls for Incentives and Prior Quality Improvement (QI) Activities, Centers Only

	Child Outcomes, Spring 2015							
	Story and Print Concepts		Peg Tapping Task		Letter Word Identification		Applied Problems	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
2014–15 Program Year								
Sustained coaching	-0.167	-0.321‡	0.579*	0.544‡	0.278**	0.215**	0.111**	0.066
Financial incentive		0.150		-0.198		0.041		0.098
2013–14 Program Year								
Training		-0.937**		-0.270		-0.271‡		-0.208*
Coaching		0.552*		1.121*		0.189		0.001
ECE courses		0.360*		0.134		0.203**		0.015
Peer support		0.195		-0.715‡		0.007		0.166*
Teacher Characteristics								
Years of ECE experience	0.000	0.001	0.024	0.025	-0.309	-0.001	-0.033	0.005*
Has Bachelor's degree	0.344*	0.322*	0.746*	1.092***	-0.002	0.124*	0.005*	0.035
Non-native English speaker	0.209	0.164	-0.071	-0.270	0.145*	-0.007	0.046	-0.009
White, non-Hispanic	0.282	0.180	-1.027*	-1.355**	0.025	-0.065	0.002	-0.027
Site Characteristics								
Program rated a 4 or 5	0.231	0.031	-0.369	-0.628	-0.060	0.026	-0.162*	-0.080
Standards-based funding	-0.301	-0.419	1.177	0.572	0.124	-0.041	-0.002	0.245
Private-pay children	0.350	0.167	0.553	-0.158	-0.012	0.021	0.299‡	0.110
Total enrollment	-0.003	-0.001	0.001	0.004	0.109	0.000	0.194	-0.001
Toddlers and infants enrolled	-0.527	-0.638	-0.578	-0.731	-0.001	-0.267	-0.001‡	-0.112
Child Characteristics								
Male	-0.210*	-0.215*	0.034	0.027	-0.085‡	-0.086‡	-0.022	-0.029
Special needs	-0.435*	-0.418*	-0.856‡	-0.934‡	-0.194*	-0.190*	-0.130‡	-0.126‡
Spanish home language	0.489**	0.493**	0.447	0.428	0.036***	-0.019	0.017**	0.088

	Child Outcomes, Spring 2015							
	Story and Print Concepts		Peg Tapping Task		Letter Word Identification		Applied Problems	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Eng./Spanish home language	0.181	0.174	-0.253	-0.299	-0.004	-0.093‡	0.088	-0.031
Other home language	0.299	0.310	-0.312	-0.285	-0.084‡	0.350*	-0.028	0.071
Fall score	0.354***	0.347*	0.434***	9.792***	0.551***	0.277	0.608***	0.000
Age at fall assessment	0.763***	0.745***	2.449***	2.467***				
Days between assessment	-0.006***	-0.001	-0.022*	-0.014	-0.003	-0.002	-0.004*	-0.001
preLAS fall score	0.117***	0.117***	0.211***	0.204***	0.036***	0.035***	0.017**	0.016**
Model R^2	0.453	0.465	0.411	0.420	0.557	0.570	0.528	0.537

‡ $p < .10$, * $p < .05$; ** $p < .01$. N = 1,037 to 1,064 children, taught by 108 teachers, in 87 centers.

Models use zero-imputed variables, in which missing values were recoded to zero. The models also include indicators for cases that were recoded. These indicator variables are not shown in the table.

Exhibit 7A.17. Associations Between Coaching on Specific Topics and Child Outcomes, With and Without Controls for Incentives and Prior Quality Improvement (QI) Activities, Centers Only

	Child Outcomes, Spring 2015							
	Story and Print Concepts		Peg Tapping Task		Letter Word Identification		Applied Problems	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
2014–15 Program Year								
Focus of Coaching								
Language/Literacy	0.095	0.108	-0.098	0.143	0.173	0.189*	-0.004	0.030
Math/Cognitive development	-0.088	-0.261	0.225	-0.348	0.058	-0.041	-0.008	-0.085*
Social-emotional development	-0.212	-0.232	-0.301	-0.527	0.013	-0.009	0.040	-0.014
Financial incentive		0.155		-0.022		0.061		0.110*
2013–14 Program Year								
Training		-0.924**		-0.745		-0.349*		-0.274**
Coaching		0.514‡		1.708**		0.301*		0.084
ECE courses		0.283‡		0.104		0.224**		0.021
Peer support		0.234		-0.311		0.038		0.204**
Teacher Character								
Years of ECE experience	0.004	0.006	0.020	0.018	-0.004‡	-0.003	0.004‡	0.005*
Has Bachelor's degree	0.301*	0.288‡	0.660*	0.910**	0.137*	0.106‡	0.051	0.026
Non-native English speaker	0.222	0.200	-0.028	-0.124	0.006	-0.020	-0.002	-0.003
White, non-Hispanic	0.315	0.301	-1.319**	-1.453***	-0.108	-0.130	-0.047	-0.021
Site Characteristics								
Program rated a 4 or 5	0.186	-0.033	-0.291	-0.299	0.181*	0.107	0.006	-0.042
Standards-based funding	-0.495	-0.493	1.282	1.258	0.277	0.231	0.357**	0.355
Private-pay children	0.273	0.193	0.361	0.211	0.112	0.079	0.157	0.145
Total enrollment	-0.003	-0.002	0.000	0.001	-0.001	0.000	-0.001‡	-0.001

	Child Outcomes, Spring 2015							
	Story and Print Concepts		Peg Tapping Task		Letter Word Identification		Applied Problems	
	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities	Controlling only for teacher characteristics	Also controlling for incentives and prior activities
Toddlers and infants enrolled	-0.556	-0.685	-0.338	-0.501	0.042	-0.180	-0.057	-0.081
Child Characteristics								
Male	-0.217*	-0.219*	0.010	0.021	-0.080‡	-0.081	-0.023	-0.027
Special needs	-0.439*	-0.412*	-0.928‡	-1.008*	-0.204**	-0.199**	-0.136‡	-0.130‡
Spanish home language	0.479**	0.470**	0.477	0.443	0.007	-0.013	0.092	0.087
Eng./Spanish home language	0.180	0.158	-0.233	-0.304	-0.072	-0.086‡	-0.028	-0.033
Other home language	0.311	0.311	-0.399	-0.403	0.357*	0.366*	0.071	0.058
Fall score	0.355***	0.351***	0.433***	0.433***	0.554***	0.542***	0.606***	0.604***
Age at fall assessment	0.765***	0.736***	2.455***	2.469***				
Days between assessment	-0.007	-0.004	-0.020‡	-0.019	-0.001	-0.001	-0.003‡	-0.001
preLAS fall score	0.116***	0.116***	0.210***	0.209***	0.037***	0.036***	0.017**	0.017**
Model R^2	0.445	0.458	0.411	0.418	0.559	0.571	0.530	0.537

‡ $p < .10$, * $p < .05$; ** $p < .01$. N = 1,037 to 1,064 children, taught by 108 teachers, in 87 centers.

Models use zero-imputed variables, in which missing values were recoded to zero. The models also include indicators for cases that were recoded. These indicator variables are not shown in the table.

Descriptive Statistics for the QI and Child Outcomes Sample (All Sites)

Exhibit 7A.18. Characteristics of Preschool Teachers in the Child Outcomes Study Sample, All Sites

Characteristic	Has Characteristic		*N*
	Number	Percentage	
Teacher and program characteristics in current year, 2014–15			
Teacher has at least a Bachelor's degree	62	57.41	108
English is not teacher's primary language	47	43.12	109
Teacher is White, non-Hispanic	17	15.89	107
Teaches in a program rated a 4 or 5	72	64.29	112
Teaches in a program with standards-based funding	101	90.18	112
Teaches in a program that enrolls private-pay children	19	16.96	112
Teaches in a site that enrolls infants and toddlers	25	22.32	112
Received a financial incentive for quality improvement in 2014–15	43	39.45	109
Quality improvement activities in previous year, 2013–14			
Teacher participated in peer support in 2013–14	53	64.63	82
Teacher participated in training in 2013–14	81	81.82	81
Teacher participated in coaching in 2013–14	82	79.61	82
Teacher participated in credit-bearing courses in 2013–14	29	27.36	29
Characteristic	**Mean**	**Standard Deviation**	***N***
Teacher and program characteristics in current year, 2014–15			
Years of ECE teaching experience	9.01	(9.30)	107
Total enrollment of site where teacher works	61.01	(33.42)	112

Exhibit 7A.19. Participation in Quality Improvement Activities and Supports Among Preschool Teachers in the Child Outcomes Study Sample, All Sites

Quality Improvement Activity	Participated in Activity		*Total N*
	Number	Percentage	
Participation in quality improvement activity			
Participated in any peer supports	69	62.16	111
Participated in any training	89	80.18	111
Participated in any coaching	96	85.71	112
Participated in any credit-bearing coursework on ECE	22	22.00	100
Participation in sustained coaching			
Received at least 2 hours of training 7 out of 10 months	42	37.5	112
Participation in coaching on content-specific topics			
25%+ coaching time focused on language/literacy	69	61.61	112
25%+ coaching time focused on math/cognitive development	48	42.86	112
25%+ coaching time focused on social emotional development	76	67.86	112

Quality Improvement Activity	Mean	Standard Deviation	*N*
Dosage of quality improvement activity			
Hours of peer support over 10 months	12.72	(17.24)	111
Hours of training over 10 months	24.50	(30.79)	110
Hours of coaching over 10 months	21.36	(34.22)	112

Appendix 8A. Quality Improvement Activity Cost Survey

Quality Improvement Activity Cost Survey

A. Introduction to survey

The American Institutes for Research (AIR) and its partners at the RAND Corporation are conducting an evaluation of the Race to the Top Early Learning Challenge Quality Rating Improvement System (RTT-ELC QRIS) in 17 County Consortia on behalf of the California Department of Education (CDE). As part of this study, we are gathering information from 11 County Consortia on the cost of planning, administering, or delivering quality improvement (QI) programs and activities.

We aim to collect cost information, to the extent possible, specific to each QI strategy for the most recent completed fiscal year. Our preliminary conversations with you helped guide the development of this instrument. We are aware that the way expenditures are reported and how QI efforts are categorized in your consortium will impact how you complete this cost survey. As such, we plan to schedule calls to answer questions and provide clarifying guidance on the instrument. Ashley Muchow (amuchow@rand.org) will reach out to you in the next two weeks to arrange times for these calls.

The six subsequent worksheets in this document (B thru G) can be used to incrementally capture six types of expenditures that, when aggregated, make up the total cost of operating and administering your consortium's QI programs and activities. We provide a separate worksheet for each category that allow quick entry of total costs or detailed lines that sum to form total costs. The detailed lines are meant to serve as guidance on what we anticipate the cost category will capture. Please respond to the questions in this survey using your best cost estimates. Total costs are automatically captured in the 'H.Totals' worksheet found at the end of this document. We then ask for fiscal year QI activity level estimates in worksheet I.

Should you have any questions while completing this form, contact Ashley Muchow at amuchow@rand.org.

Color coding

Data entry
Instructions
entries

Table A1. Preliminary information

1a. Consortium	
1b. Name and position of person completing survey	
1c. Date and time completed	
1d. Fiscal year referenced for cost information	

Instructions for completing Table A2

Table A2 outlines the county programs we have listed for your consortium. We preliminarily categorized each program by QI strategy; these classifications are intended to serve more as a starting point and can be edited. If your expenditure totals include costs of programs or activities not listed here, please enter these in the empty cells provided and classify the program or activity's QI strategy. Please indicate, using the check boxes, whether you include expenditures for these programs or activities in the totals reported in the subsequent worksheets (B thru G). Any comments or caveats you may have about a particular program or activity can be included in the "Notes/comments" column. **Definitions** for the five QI strategies are found below Table A2. We also provided a comment box below the definitions for you to provide any additional clarifying information.

Table A2. QI program and activity information

					Cost included in worksheet B-G tables?		
QI program or activity	Type of program	Primary QI strategy	Other QI strategy (if applicable)	Notes/comments	Yes, all costs are included	Yes, but some known costs are not included in these totals	No, costs are not included
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐
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					☐	☐	☐
					☐	☐	☐
					☐	☐	☐

Definitions

Coaching/mentoring	One of the five quality improvement (QI) strategies that refers specifically to programs that provide support for individualized professional development, usually one-on-one or as part of a classroom team, provided by a coach, mentor, or advisor to help improve early educators' practice or to promote quality improvement more generally.
Credit bearing courses	QI strategy that refers specifically to credit-bearing course(s) completed for unit credit at a two- or four-year college or university.
Financial incentives	QI strategy that refers specifically to individual-level financial incentives (rather than program-level incentives) to promote participation in quality improvement efforts or to improve the program more generally and can consist of wage supplements, tiered reimbursement, quality awards, etc. Financial incentives represent those not directly attributable to another QI strategy.
Noncredit bearing courses	QI strategy that refers specifically to noncredit bearing courses, seminars, workshops, or training programs that may be one-time or part of a series (including courses that provide Continuing Education Units but not including courses taken for formal college credit through a college or university).
Peer support activities	QI strategy that refers specifically to formal arrangements such as learning communities, peer support networks, or reciprocal peer coaching to discuss shared experiences and exchange ideas, information, and strategies for professional development or for program improvement more generally. Note that this does not include informal or occasional discussions with colleagues.

Comments:

Quality Improvement Activity Cost Survey

B. In-house personnel costs

Using your best cost estimates for the fiscal year (FY) specified in line 1d of Table A1, provide cost data for all in-house staff positions that spent time working on the QI programs or activities confirmed or listed in Table A2. There are two ways to provide this cost information:

Option 1: If you have a total cost estimate that includes the salaries and benefits of in-house personnel adjusted for the amount of time they spent working on QI programs or activities, you may use Table B3 and simply provide the total amount spent on salary and benefits in the fiscal year. Enter your best cost estimate as a whole number (e.g., if $500 enter 500 into the related cell). If you have an aggregate salaries and benefits figure, use the first line and note this in the comment box below Table B5. If a staff member devoted only part of his/her time to these programs or activities, adjust the total cost estimates accordingly. For example, if a staff member spent only 20% of his/her time in the fiscal year working on QI programs or activities, the salary and benefit total for that individual should be adjusted downward. In addition to these totals, please provide rough estimates of the salary and benefit costs associated with each of the five QI activities. A total is automatically calculated in line 3c.

Option 2: If you do not have a total cost estimate of in-house personnel salaries and benefits, the line items in Table B4 can be used to incrementally calculate a total. The line entries are meant to serve as a guide as to what in-house personnel to include. The position titles can be deleted and replaced with actual in-house staff positions or at whatever level your cost information is captured. E.g., if you have average salaries for a positon and an estimate of the number of FTE staff members in that position, you can provide the detail at that level rather than listing each staff position and associated salary and FTE detail. QI FTE is a ratio that indicates what portion of staff full time was spent on QI activities or programs. E.g., if a staff member works roughly 20 hours per week and 6 months out of the year and spents half of this time on QI activities or programs, their QI FTE would be 0.13 (0.5 weekly*0.5 annually*0.5 on QI programs or activities). In addition to costs and QI FTE, please provide rough estimates of the portion of staff time allocated to the five QI activities. A total is automatically calculated in row 4r.

The first two rows of Table B4 are examples. Take an executive director who devotes 25% of their time to QI activities for example. You would enter their annual salary and benefit totals, 0.25 QI FTE, and allocate 100% of that time to the 5 QI activities. Three coaches with the same annual salary working 100% on QI activities but part-time would together total 1.5 FTEs. So you enter the annual salary/benefits for one coach, 1.5 for FTEs, and the percent allocation for the five QI activities.

The totals calculated in this worksheet are rolled into the cost totals captured in the 'H.Totals' worksheet found at the end of this document. Clarification or caveats can be provided the comment box below Table B5.

Option 1

Table B3. In-house personnel cost totals

		Amount allocated to the following QI activities ($)				
		Please double check that your QI activity totals in a row equal the FY total cost entered				
	FY cost for QI activities only ($)	Coaching/ mentoring	Credit bearing courses	Noncredit bearing courses	Peer support activities	Financial incentives
3a. Total salary						
3b. Total benefits						
3c. Total						

Option 2 (if did not complete Table B3)

Table B4. In-house personnel cost detail

					Percentage of time allocated to the following QI activities (%)				
					Estimates should sum to 100%				
Staff position/title	FY Salary ($)	FY Benefits ($)	QI FTE (#)	Total cost ($)	Coaching/ mentoring	Credit bearing courses	Noncredit bearing courses	Peer support activities	Financial incentives
Example: Executive director	*$70,000*	*$14,000*	*0.25*	*$21,000*	*0%*	*30%*	*25%*	*0%*	*45%*
Example: Coaches	*$35,000*	*$7,000*	*1.50*	*$63,000*	*100%*	*0%*	*0%*	*0%*	*0%*
4a. Executive director									
4b. Director									
4c. Administrator									
4d. Coordinator									
4e. Program manager									
4f. Facilitator									
4g. Administrative assistant									
4h. Support staff									
4i. Coach									
4j. Trainer									
4k. Workshop presenter									
4l. Outreach coordinator									
4m. Other (specify):									
4n. Other (specify):									
4o. Other (specify):									
4p. Other (specify):									
4q. Other (specify):									
4r. Total									

If you provided information on benefits in the total provided above, please use the check boxes in Table B5 to indicate what benefits were offered to in-house personnel and whether these benefits are captured in the totals provided in Table B3 or Table B4.

Table B5. Benefits offered to in-house personnel

	Benefit offered to staff	Included in benefit total
Health insurance	☐	☐
Pension and retirement	☐	☐
Disability	☐	☐
Vacation	☐	☐
Unemployment insurance	☐	☐
Workers compensation	☐	☐
Sick Leave	☐	☐
	☐	☐
	☐	☐
	☐	☐

Comments:

Quality Improvement Activity Cost Survey

C. Material and supply costs

Using your best cost estimates for the fiscal year (FY) specified in line 1d of Table A1, provide supply and material cost data for the QI programs or activities listed in Table A2. ***The cost estimates we are asking for here are those associated with the provision of QI activities or programs, not all QRIS activities.*** In addition to this annual cost estimate, please provide rough estimates of the proportion each expense was put toward supporting the five quality improvement (QI) activities. There are two ways to provide this information:

Option 1: If you have a total cost estimate for materials and supplies, use Table C6 and simply provide the total amount spent in the fiscal year. If you would like to use the staff time proportions provided in worksheet B as your estimate of the proportion each expense was put toward supporting the five QI activities, check the box above and the amounts will automatically populate. If not, enter your best cost estimate as a whole number (e.g., if $500 enter 500 into the related cell). If you would like to refer to the percentages provided in Table B4 to guide your allocation of costs to each of the 5 QI activities, use the checkbox in Table C7 and reference the percentages that pull from Table B4. ***Note that if you edit these cells, the formulas that automatically pull the proportions from Table B3 will be lost.*** A total is automatically calculated in line 6b.

Option 2: If you do not have a total cost estimate, the line items in Table C7 can be used to incrementally calculate a total. The line entries are meant to serve as a guide as to what types of material and supply costs to include in the total. The material and supply items can be deleted and replaced with actual cost items. If you would like to use the staff time proportions provided in worksheet B as your estimate of the proportion each expense was put toward supporting the five QI activities, check the box above and the percentages will automatically populate. If not, enter your best percent estimate as a whole number (e.g., if 5% enter 5 into the related cell). ***Note that if amounts are entered in these cells, the formulas that automatically pull the proportions from Table B4 will be lost.*** A total is automatically calculated in row 7m.

The totals calculated in this worksheet are rolled into the cost totals captured in the 'H.Totals' worksheet found at the end of this document. Clarification or caveats can be provided the comment box below Table C7.

Option 1

Table C6. Material and supply cost totals

		Amount allocated to the following QI activities ($)				
		Use staff time proportions provided in Table B3 *NOTE: Automatically populated amounts will be lost if you edit the cells below*				☐
	FY cost for QI activities only ($)	Coaching/ mentoring	Credit bearing courses	Noncredit bearing courses	Peer support activities	Financial incentives
6a. Total material and supply costs						
6b. Total						

Option 2 (if did not complete Table C6)

Table C7. Materials and supplies cost detail

		Percentage of cost allocated to the following QI activities (%)				
		Use staff time proportions provided in Table B4 *NOTE: Automatically populated percents will be lost if you edit the cells below*				☐
Material/supply	FY cost for QI activities only ($)	Coaching/ mentoring	Credit bearing courses	Noncredit bearing courses	Peer support activities	Financial incentives
7a. Computers						
7b. Communication equipment						
7c. Travel (i.e., mileage reimbursements)						
7d. Office supplies (i.e., pens, paper, folders)						
7e. Computer/printer supplies						
7f. Postage						
7g. Books						
7h. Subscriptions/professional memberships						
7g. Instructional materials						
7h. Utilities						
7i. Other (specify):						
7j. Other (specify):						
7k. Other (specify):						
7l. Other (specify):						
7m. Total						

Comments:

Quality Improvement Activity Cost Survey

D. Building and facility costs

Using your best cost estimates for the fiscal year (FY) specified in line 1d of Table A1, provide building and facility cost data for the QI programs or activities listed in Table A2. ***The cost estimates we are asking for here are those associated with the provision of QI activities or programs, not all QRIS activities.*** In addition to this annual cost estimate, please provide rough estimates of the proportion each expense was put toward supporting the five quality improvement (QI) activities. There are two ways to provide this information:

Option 1: If you have a total cost estimate for building and facilities, use Table D8 and simply provide the total amount spent in the fiscal year. If you would like to use the staff time proportions provided in worksheet B as your estimate of the proportion each expense was put toward supporting the five QI activities, check the box above and the amounts will automatically populate. If not, enter your best cost estimate as a whole number (e.g., if $500 enter 500 into the related cell). If you would like to refer to the percentages provided in Table B4 to guide your allocation of costs to each of the 5 QI activities, use the checkbox in Table D9 and reference the percentages that pull from Table B4. ***Note that if you edit these cells, the formulas that automatically pull the proportions from Table B3 will be lost.*** A total is automatically calculated in line 8b.

Option 2: If you do not have a total cost estimate, the line items in Table D9 can be used to incrementally calculate a total. The line entries are meant to serve as a guide as to what types of building and facility costs to include in the total. The building and facility items can be deleted and replaced with actual cost items. If you would like to use the staff time proportions provided in worksheet B as your estimate of the proportion each expense was put toward supporting the five QI activities, check the box above and the percentages will automatically populate. If not, enter your best percent estimate as a whole number (e.g., if 5% enter 5 into the related cell). ***Note that if amounts are entered in these cells, the formulas that automatically pull the proportions from Table B4 will be lost.*** A total is automatically calculated in row 9h.

The totals calculated in this worksheet are rolled into the cost totals captured in the 'H.Totals' worksheet found at the end of this document. Clarification or caveats can be provided the comment box below Table D9.

Option 1

Table D8. Building and facility cost totals

		Amount allocated to the following QI activities ($)				
		Use staff time proportions provided in Table B3 *NOTE: Automatically populated amounts will be lost if you edit the cells below*				☐
	FY cost for QI activities only ($)	Coaching/ mentoring	Credit bearing courses	Noncredit bearing courses	Peer support activities	Financial incentives
8a. Total building and facility costs						
8b. Total						

Option 2 (if did not complete Table D8)

Table D9. Building and facility cost detail

		Percentage of cost allocated to the following QI activities (%)				
		Use staff time proportions provided in Table B4 *NOTE: Automatically populated percents will be lost if you edit the cells below*				☐
Building/facility expense	FY cost for QI activities only ($)	Coaching/ mentoring	Credit bearing courses	Noncredit bearing courses	Peer support activities	Financial incentives
9a. Rents and leases						
9b. Repairs and maintenance						
9c. Utilities						
9d. Other (specify):						
9e. Other (specify):						
9f. Other (specify):						
9g. Other (specify):						
9h. Total						

Comments:

Quality Improvement Activity Cost Survey

E. Direct costs

Using your best cost estimates for the fiscal year (FY) specified in line 1d of Table A1, provide direct cost data for the QI programs or activities listed in Table A2. ***The cost estimates we are asking for here are those associated with the provision of QI activities or programs, not all QRIS activities.*** In addition to this annual cost estimate, please provide rough estimates of the porportion each expense was put toward supporting the five quality improvement (QI) activities. There are two ways to provide this information:

Option 1: If you have a total cost estimate for direct expenses, use Table E10 and simply provide the total amount spent in the fiscal year. If you would like to use the staff time proportions provided in worksheet B as your estimate of the porportion each expense was put toward supporting the five QI activities, check the box above and the amounts will automatically populate. If not, enter your best cost estimate as a whole number (e.g., if $500 enter 500 into the related cell). If you would like to refer to the percentages provided in Table B4 to guide your allocation of costs to each of the 5 QI activities, use the checkbox in Table E11 and reference the percentages that pull from Table B4. ***Note that if you edit these cells, the formulas that automatically pull the proportions from Table B3 will be lost.*** A total is automatically calculated in line 10b.

Option 2: If you do not have a total cost estimate, the line items in Table E11 can be used to incrementally calculate a total. The line entries are meant to serve as a guide as to what types of direct costs to include in the total. The direct cost items can be deleted and replaced with actual cost items. If you would like to use the staff time proportions provided in worksheet B as your estimate of the porportion each expense was put toward supporting the five QI activities, check the box above and the percentages will automatically populate. If not, enter your best percent estimate as a whole number (e.g., if 5% enter 5 into the related cell). ***Note that if amounts are entered in these cells, the formulas that automatically pull the proportions from Table B4 will be lost.*** A total is automatically calculated in row 11o.

The totals calculated in this worksheet are rolled into the cost totals captured in the 'H.Totals' worksheet found at the end of this document. Clarification or caveats can be provided the comment box below Table E11.

Option 1

Table E10. Direct cost totals

		Amount allocated to the following QI activities ($)				
		Use staff time proportions provided in Table B3 *NOTE: Automatically populated amounts will be lost if you edit the cells below*				☐
	FY cost for QI activities only ($)	Coaching/ mentoring	Credit bearing courses	Noncredit bearing courses	Peer support activities	Financial incentives
10a. Total direct						
10b. Total						

Option 2 (if did not complete Table E10)

Table E11. Direct cost detail

		Percentage of cost allocated to the following QI activities (%)				
		Use staff time proportions provided in Table B4 *NOTE: Automatically populated percents will be lost if you edit the cells below*				☐
Direct expense	FY cost for QI activities only ($)	Coaching/ mentoring	Credit bearing courses	Noncredit bearing courses	Peer support activities	Financial incentives
11a. Tuition assistance						
11b. Training stipends						
11c. Books and supply stipends						
11d. Direct payments to community colleges						
11e. Direct payments to training providers						
11f. Direct payments to training sites						
11g. Financial incentive payments						
11h. Quality awards						
11i. Other (specify):						
11j. Other (specify):						
11k. Other (specify):						
11l. Other (specify):						
11m. Other (specify):						
11n. Other (specify):						
11o. Total						

Comments:

Quality Improvement Activity Cost Survey

F. Indirect costs

Using your best cost estimates for the fiscal year (FY) specified in line 1d of Table A1, provide indirect cost data for the QI programs or activities listed in Table A2. ***The cost estimates we are asking for here are those associated with the provision of QI activities or programs, not all QRIS activities.*** In addition to this annual cost estimate, please provide rough estimates of the porportion each expense was put toward supporting the five quality improvement (QI) activities. There are two ways to provide this information:

Option 1: If you have a total cost estimate for direct expenses, use Table F12 and simply provide the total amount spent in the fiscal year. If you would like to use the staff time proportions provided in worksheet B as your estimate of the porportion each expense was put toward supporting the five QI activities, check the box above and the amounts will automatically populate. If not, enter your best cost estimate as a whole number (e.g., if $500 enter 500 into the related cell). If you would like to refer to the percentages provided in Table B4 to guide your allocation of costs to each of the 5 QI activities, use the checkbox in Table F13 and reference the percentages that pull from Table B4. ***Note that if you edit these cells, the formulas that automatically pull the proportions from Table B3 will be lost.*** A total is automatically calculated in line 12b.

Option 2: If you do not have a total cost estimate, the line items in Table F13 can be used to incrementally calculate a total. The line entries are meant to serve as a guide as to what types of indirect costs to include in the total. The indirect cost items can be deleted and replaced with actual cost items. If you would like to use the staff time proportions provided in worksheet B as your estimate of the porportion each expense was put toward supporting the five QI activities, check the box above and the percentages will automatically populate. If not, enter your best percent estimate as a whole number (e.g., if 5% enter 5 into the related cell). ***Note that if amounts are entered in these cells, the formulas that automatically pull the proportions from Table B4 will be lost.*** A total is automatically calculated in row 13k.

The totals calculated in this worksheet are rolled into the cost totals captured in the 'H.Totals' worksheet found at the end of this document. Clarification or caveats can be provided the comment box below Table F13.

Option 1

Table F12. Indirect cost totals

		Amount allocated to the following QI activities ($)				
		Use staff time proportions provided in Table B3 *NOTE: Automatically populated amounts will be lost if you edit the cells below*				☐
	FY cost for QI activities only ($)	Coaching/ mentoring	Credit bearing courses	Noncredit bearing courses	Peer support activities	Financial incentives
12a. Total indirect						
12b. Total						

Option 2 (if did not complete Table F12)

Table F13. Indirect cost detail

		Percentage of cost allocated to the following QI activities (%)				
		Use staff time proportions provided in Table B4 *NOTE: Automatically populated percents will be lost if you edit the cells below*				☐
Indirect expense	FY cost for QI activities only ($)	Coaching/ mentoring	Credit bearing courses	Noncredit bearing courses	Peer support activities	Financial incentives
13a. Accounting costs						
13b. Human resources						
13c. Marketing						
13d. Other (specify):						
13e. Other (specify):						
13f. Other (specify):						
13g. Other (specify):						
13h. Other (specify):						
13i. Other (specify):						
13j. Other (specify):						
13k. Total						

Comments:

Quality Improvement Activity Cost Survey

G. Contractor costs

Using your best cost estimates for the fiscal year (FY) specified in line 1d of Table A1, provide contractor cost data for the QI programs or activities listed in Table A2. ***The cost estimates we are asking for here are those associated with the provision of QI activities or programs, not all QRIS activities.*** In addition to this annual cost estimate, please provide rough estimates of the proportion each expense was put toward supporting the five quality improvement (QI) activities. There are two ways to provide this information:

Option 1: If you have a total contractor cost estimate, use Table G14 and simply provide the total amount spent in the fiscal year. If you would like to use the staff time proportions provided in worksheet B as your estimate of the proportion each expense was put toward supporting the five QI activities, check the box above and the amounts will automatically populate. If not, enter your best cost estimate as a whole number (e.g., if $500 enter 500 into the related cell). If you would like to refer to the percentages provided in Table B4 to guide your allocation of costs to each of the 5 QI activities, use the checkbox in Table G15 and reference the percentages that pull from Table B4. ***Note that if you edit these cells, the formulas that automatically pull the proportions from Table B3 will be lost.*** A total is automatically calculated in line 14b.

Option 2: If you do not have a total cost estimate, the line items in Table G15 can be used to incrementally calculate a total. Placeholder entries can be deleted and replaced with individual contractor information. If you would like to use the staff time proportions provided in worksheet B as your estimate of the proportion each contractor put toward supporting the five QI activities, check the box above and the percentages will automatically populate. If not, enter your best percent estimate as a whole number (e.g., if 5% enter 5 into the related cell). ***Note that if amounts are entered in these cells, the formulas that automatically pull the proportions from Table B4 will be lost.*** A total is automatically calculated in row 15k.

The totals calculated in this worksheet are rolled into the cost totals captured in the 'H. Totals' worksheet found at the end of this document. Clarification or caveats can be provided the comment box below Table F13.

Option 1

Table G14. Contractor cost totals

		Amount allocated to the following QI activities ($)				
		Use staff time proportions provided in Table B3 *NOTE: Automatically populated amounts will be lost if you edit the cells below*				☐
	FY cost for QI activities only ($)	Coaching/ mentoring	Credit bearing courses	Noncredit bearing courses	Peer support activities	Financial incentives
14a. Total contractor						
14b. Total						

Option 2 **(if did not complete Table G14)**

Table G15. Contractor cost detail

			Percentage of cost allocated to the following QI activities (%)				
			Use staff time proportions provided in Table B4 *NOTE: Automatically populated percents will be lost if you edit the cells below*				☐
Contractor	Type of service/program	FY cost for QI activities only ($)	Coaching/ mentoring	Credit bearing courses	Noncredit bearing courses	Peer support activities	Financial incentives
15a. Contractor 1							
15b. Contractor 2							
15c. Contractor 3							
15d. Contractor 4							
15e. Contractor 5							
15f. Contractor 6							
15g. Contractor 7							
15h. Contractor 8							
15i. Contractor 9							
15j. Contractor 10							
15k. Total							

Comments:

Quality Improvement Activity Cost Survey

H. Total costs

The totals calculated in the preceding six worksheets (B thru G) have been summed to the total costs listed in Table H16 below. Each cost category is individually broken out by aggregate cost and the totals allocated the five QI activities. There is one worksheet per total cost line item.

Table H16. Total costs by category and QRIS program/activity

		Costs allocated to the following QI activities ($)				
	FY cost for QI activities only ($)	Coaching/ mentoring	Credit bearing courses	Noncredit bearing courses	Peer support activities	Financial incentives
B. In-house personnel						
C. Materials and supplies						
D. Buildings and facilities						
E. Direct						
F. Indirect						
G. Contracts						
Total	$0	$0	$0	$0	$0	$0

Quality Improvement Activity Cost Survey

I. QI activity levels

Using Table I17, provide estimates for the activity level of each QI strategy in the fiscal year identified in line 1d of Table A1. We have listed more than one measure for each of the five QI strategies. We understand that you may not keep track of some measures, but ask that you complete as much as you are able.

Note that the cost information provided in the earlier worksheets does not necessarily need to line up with the figures provided in Table I17. We are simply trying to capture estimates of the level of activity devoted to each of the five QI strategies by your consortium in the fiscal year. Any caveats or supplemental information can be provided in the comment box below.

Table I17. QI activity levels

	FY estimate (number)
Coaching/mentoring	
1. Annual hours of coaching/mentoring provided	
2. Annual ECE workforce members receiving coaching/mentoring	
Credit bearing courses	
1. Annual credit-hours of coursework supported	
2. Annual ECE workforce members receiving support for credit-bearing courses	
Financial incentives	
1. If specific to providers, number of providers receiving financial incentive during the year	
2. If specific to classroom, number of ECE classrooms receiving financial incentive during the year	
3. If specific to ECE staff, number of ECE staff receiving financial incentives during the year	
Noncredit bearing courses	
1. Annual hours of noncredit bearing coursework delivered (e.g., offering 5 two-hour long courses would result in an entry of 10 hours)	
2. Annual ECE workforce members taking noncredit-bearing courses (e.g., number of unique individuals taking at least one course)	
3. Annual person-hours of noncredit bearing coursework delivered (e.g., if 100 people took 1 two-hour course and 5 of those 100 each took an additional two-hour course, the total person hours would be (100*2)+(5*2)=210)	
Peer support activities	
1. Annual person-hours in peer support activities	
2. Number of participants during year in peer support activities	

Comments: