# Evaluation of Comprehensive Approaches to Raising Educational Standards (CARES) Plus Program, 2011–2016



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# **Executive Summary**

# Introduction

Comprehensive Approaches to Raising Educational Standards (CARES) Plus was designed to support early educators working with children ages 0 to 5 by providing stipends, training, and higher education. Specific program objectives included:

- Increasing teacher effectiveness by improving quality of interactions with children
- Helping teachers develop professionally through coursework in Early Childhood Education (ECE) and Child Development (CD), or obtain an ECE degree or California CD permit
- Train, retain, and support qualified teachers in the field

The CARES Plus program provided early childcare educators a set of basic trainings and supports (CORE) along with four additional professional development components (A, B, C, and D) centered around improving effective teacher-child interactions.

- CORE: a set of online training modules focused on identifying and analyzing effective teacher-child interactions using the Classroom Assessment Scoring System<sup>®</sup> (CLASS<sup>®</sup>) tool
- Component A: 21 hours of evidence-based approved training
- Component B: Six hours of higher education toward a degree in ECE, CD, or a related field
- Component C: Participants served as a CARES Plus advisor (this component is not part of this evaluation)
- Component D: MyTeachingPartner™ (MTP™): One-on-one coaching between the participant and coach

# Participant Enrollment and Children Served

Over 25,800 early educators enrolled in CARES Plus between 2012–13 and 2015–16. Over 500,000 children were served by CARES Plus participants, including dual language learners and children in Individualized Family Service Plan (IFSP) or Individual Education Plan (IEP) programs. This evaluation report does not include data from 2011–2012, the first year of CARES Plus, because of delays in program implementation and data collection. Program data were more complete and timely beginning the 2012–13 program year.

# Results

The evaluation of CARES Plus consisted of three views of the program involving different sources of information:

- Lead Agency: Based on the Quality Performance Report (QPR) which gathered information from Lead Agencies about institutional and operational aspects of running the program
- Participants: Based on online surveys completed by participants
- Research-Based Assessment: Based on observations of participants with the CLASS<sup>®</sup> tool for teacher-child interaction

# Lead Agency Collaboration

CARES Plus County Lead Agencies collaborated with other local partners to assist in program implementation. Common partners included:

- County offices of education
- Head Start/Early Head Start
- Institutions of higher education
- Other local agencies

### Participant Survey

Most participants found CARES Plus to be very useful for their professional development:

- Ninety-two percent reported the effect of their CARES Plus experience on the children in their care was "very positive."
- Eighty percent reported they were "very much" a better teacher because of their participation in CARES Plus.
- Eighty-five percent reported CARES Plus was a "very useful" learning experience in meeting their professional development goals.
- Eighty-three percent reported CARES Plus "very much" helped them continue working in the ECE field instead of another field of employment.
- Ninety-five percent expected to be working in the early care and education field in the next five years.

# Research-Based Assessment: Teacher-Child Interactions

Findings for changes in average PreK CLASS<sup>®</sup> scores between pre (fall) and post (spring) observations included these patterns:

- Component A (CDE-Approved Training): Participants showed significant improvement in the domains of Emotional Support and Classroom Organization.
- Component B (Higher Education Coursework): Participants showed no significant improvement in any of the three CLASS domains.
- Component D (MTP Coaching): Participants showed significant improvement in all three domains (Emotional Support, Classroom Organization, and Instructional Support).

Findings for changes in the percent of participants at or above quality improvement standards between pre (fall) and post (spring) CLASS observations included these patterns:

- Component A (CDE-Approved Training): Participants showed significant improvement in the PreK CLASS Emotional Support and Classroom Organization domains.
- Component B (Higher Education Coursework): Participants showed significant improvement in the Emotional Support domain.
- Component D (MTP Coaching): Participants showed significant improvement in all three domains: Emotional Support, Classroom Organization, and Instructional Support.

For the MTP coaching model, PreK CLASS score improvement varied by participant characteristics, including the number of MTP cycles completed, years of experience in early childhood education, level of education, and primary position:

- Individuals who completed ten or more MTP cycles showed greater improvement in PreK CLASS scores across all domains relative to those with less than ten cycles.
- Individuals who completed more than 15 cycles showed the greatest improvement in Instructional Support scores.
- Improvement in CLASS scores did not differ by number of years in the field.
- Individuals with less than a bachelor's degree showed a greater increase in CLASS<sup>®</sup> scores across all domains relative to those with a bachelor's degree or higher, though the difference was not statistically significant.

• Teachers and assistants/aides showed a significant increase in the Instructional Support domain relative to administrators/supervisors.

# **CARES Plus Program**

#### Introduction

Quality teacher-child interactions are powerful contributors to children's learning and success. Educators who have the knowledge and skills to identify the needs of specific children, and engage children through meaningful adult-child interactions are best able to support children's cognitive and social-emotional development. Teacher quality is so critical that a growing number of state and federal programs have mandated that early childhood educators attain additional professional development and training in the field.

To address the urgent need to enhance the quality and retention of the early learning workforce, First 5 California (F5CA) launched the Comprehensive Approaches for Raising Educational Standards (CARES) in 2000 as a matching-funds program with 44 county commissions. CARES was designed to support the professional development, education, and retention of the early childhood workforce. CARES gained national recognition from Head Start, Zero to Three, and the Center for Law and Social Policy during its tenure.

In April 2010, the F5CA State Commission approved \$12 million in funding for three years for CARES Plus (FYs 2010–11 through 2012–13, Round 1). In October 2012, the F5CA State Commission approved an additional \$14 million in funds (FYs 2013–14 through 2015–16, Round 2). The CARES Plus program ended June 30, 2016, when workforce development efforts were integrated into First 5 IMPACT and the California Quality Rating and Improvement System (CA–QRIS).

### **Program Goals**

The goals of CARES Plus were: 1) to increase the quality of early learning programs for children ages 0 to 5 by supporting the professional development of the early learning workforce with an emphasis on training for effective teacher-child interactions, 2) provide a stable early childhood education workforce, and 3) to improve child outcomes (see Appendix A for logic model). CARES Plus participants received incentives, training, and technical assistance for early childhood educators to improve their education, practice, and increased participation in targeted professional development. The CARES Plus objectives were to:

- Improve the effectiveness of the early learning workforce
- Positively impact the learning and developmental outcomes of young children
- Increase retention of the early learning workforce
- Offer support services and stipends to encourage professional development

• Provide smoking cessation training to inform and encourage participants to share information and resources with families and staff

# **Program Description**

Each CARES Plus Lead Agency was responsible for developing a consortium consisting of organizations with the same goals and objectives to improve the quality of early learning within a given county. Lead Agencies were encouraged to collaborate whenever feasible to create cohesive programs, share resources, and reduce administrative costs.

During CARES Plus Rounds 1 and 2, quality professional development opportunities were available in both English and Spanish for early childhood educators, with some support services available in additional languages. These support service opportunities included access to online best practice learning sessions, a video library of exemplary teacher-child interactions, one-on-one coaching, and at least two sessions with a professional growth advisor.

Through CARES Plus, F5CA incorporated the use of the Classroom Assessment Scoring System<sup>®</sup> (CLASS<sup>®</sup>) tools developed at the University of Virginia (Pianta, 2008). The following validated professional development tools and training were available to CARES Plus participants:

- The CLASS observation tool: An assessment focused on the effectiveness of classroom interactions among teachers and children, using a common language and lens to evaluate the quality and improvement of those interactions
- Introduction to the CLASS: An online, two-hour interactive course to gain an understanding of the CLASS framework
- Looking at CLASSrooms: A self-paced directed study using exemplar videos to focus on identifying and analyzing effective teacher-child interactions
- MyTeachingPartner<sup>™</sup> (MTP<sup>™</sup>): An evidence-based professional development model focused on improving classroom interactions through intensive one-on-one coaching, classroom observation, and reflective analysis of teaching practice

### **CARES Plus Program Requirements and Pathways**

During CARES Plus, first year participants were required to complete three CORE online courses: *Introduction to the CLASS, Looking at CLASSrooms,* and a one-hour online tobacco training module titled, *Kids and Smoke Don't Mix: A Tobacco Training for Child Care Providers and Preschool Teachers.* In addition, each participant was required to meet twice each year with a CARES Plus Advisor, develop a Professional Growth Plan, and choose one or more of four professional development pathways, also known as a "Component":

#### Table 1: CARES Plus Components

CORE	<ul> <li>Introduction to the CLASS</li> <li>Looking at CLASSrooms</li> <li>CARES Plus Tobacco Training: <i>Kids and Smoke Don't Mix</i></li> <li>Annual meeting with a CARES Plus Advisor, completion a Professional Growth Plan, approved component requirements (elective, identified below), and completion of an annual participant survey.</li> </ul>
Component A	<ul> <li>Minimum of 21 hours of California Department of Education-approved professional growth training</li> <li>CLASS<sup>®</sup> observation (if randomly selected)</li> </ul>
Component B	<ul> <li>Minimum of six units of higher education towards a degree in Early Childhood Education/Child Development (ECE/CD) or related field</li> <li>CLASS observation (if randomly selected)</li> </ul>
Component C	Serve as CARES Plus Advisor
Component D	<ul> <li>MyTeachingPartner<sup>™</sup> (MTP<sup>™</sup>) one-on-one professional growth coaching</li> <li>Required to participate in CLASS<sup>™</sup> observation</li> </ul>

For a detailed description of the evaluation methodology for program components, please refer to Appendix B.

# **CARES Plus Program Demographics**

### Enrollment

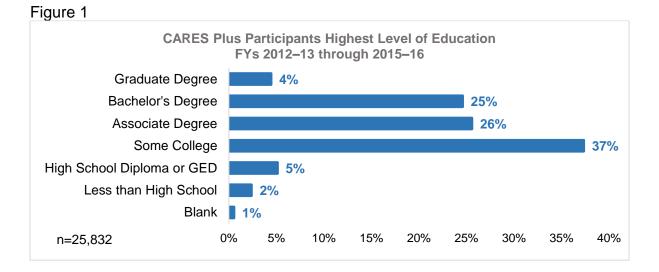
Over 25,800 participants enrolled in CARES Plus between FYs 2012–13 and 2015–16, with 17,787 (69 percent) completing their programs, while 8,027 participants (31 percent) withdrew from the program. Reasons for withdrawal included high cost of tuition, computer literacy, and access to technology/high-speed internet access. All participants who successfully completed the CARES Plus program requirements received a stipend from the County Lead Agencies. In FY 2012–13, 6,133 participants enrolled, with an increase to 6,675 participants enrolled in FY 2015–16. Some participants participated more than one year. Some participants enrolled in multiple components, which accounted for the total component enrollment count being larger than the total number of participants. In addition to the required CORE component, participants enrolled in one or more components: Component A (32 percent), B (56 percent), C (3 percent), and D (or MTP) (9 percent) (see Tables C1–C3 for detailed breakdown of enrollments by fiscal year, demographics, and county).

#### **Race/Ethnicity and Gender**

For FYs 2012–13 to 2015–16, participants' self-reported race/ethnicity as Hispanic or Latino (50 percent), White (22 percent), Asian (11 percent), and Black or African American (9 percent). All other participant's race/ethnicity categories were one percent or less. Participants were 98 percent female and 2 percent male as seen in Table C2.

#### **Education Level**

Participant education level ranged from a bachelor's degree or higher (29 percent); to an associate's degree (26 percent); to less than an associate's degree, which includes some college, high school diploma, or less than high school diploma (45 percent) (see Figure 1).



#### Primary Language and Language Spoken in the Classroom

Participants' primary languages were English (63 percent), Spanish (26 percent), Vietnamese (1 percent), and Mandarin and Cantonese less than 1 percent each (see Table C4). Most primary languages spoken in the classroom were English (81 percent) and Spanish (14 percent) (see Table C5).

#### **Child Development Permits**

Sixty-six percent of participants held Child Development permits, including Program Director, Site Supervisor, Master Teacher, Teacher, Associate Teacher, and Assistant (see Table C6).

#### Years in the Early Childhood Education Field (ECE)

The number of years participants worked in the ECE field varied. Directors, Supervisors, and Administrators had a mean range of 15 to 20 years in the ECE field. Teachers, Owner/Operators, and Professional Support Staff had a mean range of 11 to 15 years in the ECE field; and Assistants, Assistant Teachers, and Teacher's Aides had a mean range of 5 to 9 years in the ECE field (see Table C7).

#### **Position Type**

The most common position was Teachers (42 percent), which included Teacher/Lead Teacher, Teacher, Teacher/Director, and Master/Lead Teacher categories. Assistant Teacher/Teacher Aides and Assistants comprised 32 percent of participants. Thirteen percent of the participants identified themselves as Owner/Operators. The remaining 13 percent identified themselves as an administrator (includes director, assistant director, executive director, site supervisor, professional support staff), specialized teaching staff, or other/unknown (see Table C8).

#### **Facility Program Type**

The majority of the sites where CARES Plus participants worked were Licensed Child Care Centers/Early Childhood Programs (78 percent), followed by Licensed Family Child Care Homes (19 percent), and Licensed-Exempt Centers or School-Aged programs (2 percent) (see Table C9).

# **Children Served**

#### Number and Percent of Children Served

The majority of children served by CARES Plus participants were in Pre-Kindergarten programs (411,325; 76 percent), followed by Toddler programs (94,378; 17 percent), and Infant programs (32,457; 6 percent) (see Figure 2). Most children were in Licensed Child Care/Early Childhood programs, (485,300; 90 percent), followed by Licensed Family Child Care programs, (40,457; 7 percent), and License-Exempt or School Age programs (11,559; 2 percent) (see Figure 3).



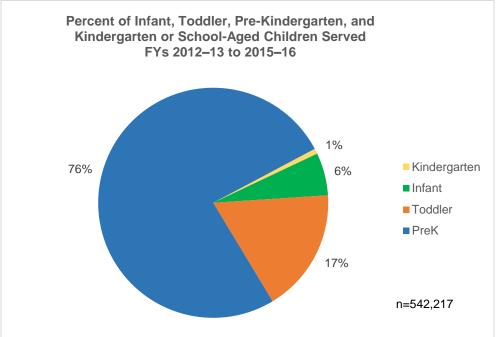
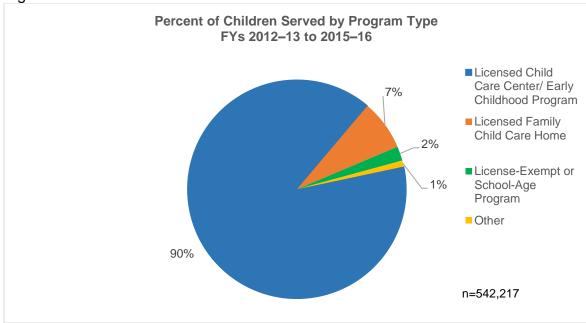
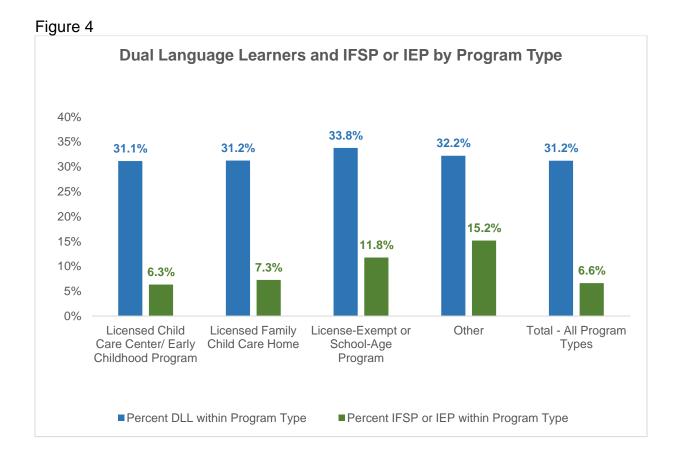


Figure 3



#### Dual Language Learners and Children with an IFSP or IEP

As reported by CARES Plus participants, over 169,000 (31 percent) of children served were Dual Language Learners. Children in Individual Family Service Plan (IFSP) or Individual Education Plan (IEP) programs comprised 35,819 (7 percent) of all children served from FYs 2012–13 to 2015–16 (see Figure 4).



# Lead Agency Collaboration with Local Partners and Programs

#### **Collaboration with Local Partners**

CARES Plus County Lead Agencies collaborated with other local partners to implement local CARES Plus programs, including early learning programs, resource and referral agencies, county offices of education, institutions of higher education, and others. Below are some examples of this type of collaboration:

• El Dorado County partnered with their local institution of higher education, and resource and referral agency in outreach and recruitment efforts.

- Madera County partnered with their local Early Head Start/Head Start, their local Association for the Education of Young Children (AEYC), the Family Child Care Network (FCCN), Race to the Top–Early Learning Challenge (RTT–ELC) grantees, the Child Development Directors' Association, and migrant education programs in outreach for recruitment efforts, as well as communication of program information to participants to support retention.
- Sacramento County utilized the local family child care home association that facilitated opportunities to recruit potential CARES Plus participants.
- San Francisco County partnered with the Mission Economic Development Agency, which worked with local small businesses such as Family Child Care Homes (FCCHs) in the area and helped in recruitment. Local child care networks and associations helped to share information through their membership. WestEd provided supports regarding the CLASS<sup>®</sup> tool and encouraged participants to join the program.

#### **Collaboration with Other Programs**

The collaboration between CARES Plus and AB 212, a similar professional development program administered by the California Department of Education, has been fundamental since 2000. This partnership provided access for more participants and helped strengthen the services offered to early educators. In 2015–16, 78 percent of participating counties required the same or similar program activities and 68 percent combined recruitment efforts. In addition to AB 212, CARES Plus County Lead Agencies collaborated with other programs; most notably, 70 percent of CARES Plus Lead Agencies reported collaboration efforts with local Head Start and Early Head Start programs. Collaboration efforts included:

- Allocation of in-kind services
- Additional funding
- Professional growth advising
- Partnership in outreach and recruitment efforts

### Challenges

Many of the program implementation challenges faced by County Lead Agencies were common to all local programs, particularly in regards to participant involvement in continuing education. Frequent barriers to continuing education reported by participants to CARES Plus Lead Agencies included:

• Absence of courses in the evening or weekends

- High cost of tuition
- High cost of text books
- Lack of participant readiness for college level coursework
- Transportation
- Computer literacy
- Access to technology and high-speed Internet, especially a barrier in some rural areas

#### Successes

County Lead Agencies provided examples of local program successes. Below are some of the most commonly reported highlights:

- Collaboration with local agencies and administrators, including program alignment and partnership with AB 212 and Local Planning Councils, and successful integration of Race to the Top–Early Learning grant funding
- Increased program participation over the previous years
- Participant support services and increased opportunity to access professional development. Many participants who were family child care home providers completed online professional development, which they had not attempted to do before participating in CARES Plus.
- Participant success in meeting and exceeding the required professional growth requirement for Child Development Permit renewal and/or were able to obtain a higher-level permit
- Ninety-five percent of CARES Plus Lead Agencies that offered Component D (MTP) reported most or all participants conveyed a positive experience with MTP

#### **Lessons Learned**

In a survey, County Lead Agencies identified lessons learned during the CARES Plus program. Below are a few highlights:

• One-on-one coaching (via CARES Plus professional development advising or MTP) was one of the most effective ways to improve classroom practices.

- Administrative "buy-in" and support was key to implementing effective classroom practices, and teaching teams supporting each other in both individual and common classroom goals was very effective.
- Relationships with onsite coaches were critical to recruitment of applicants and increased levels of engagement.
- Word of mouth and a person's positive experience with the CARES Plus program was the greatest marketing tool.
- Los Angeles County reported coursework remained the most frequent barrier to program completion. As a result, F5LA contracted with Los Angeles Community College to offer weekend coursework that covered appropriate course material for CARES participants.

### **Local Evaluation Efforts**

CARES Plus County Lead Agencies were required to conduct local evaluation activities and report local evaluation findings. The most common local evaluation activities were participant surveys, accounting for approximately 70 percent of evaluation efforts; personal interviews (27 percent); and CLASS<sup>®</sup> observations (20 percent). Of the County Lead Agencies that reported evaluation results, common findings included:

- High levels of participant satisfaction and retention in the CARES Plus program
- High levels of value placed on distance and in-person coaching associated with improved self-efficacy and CLASS scores
- Participants who created action plans focused on specific and achievable goals were able to change their perspectives and integrated new behaviors into their daily teaching practices
- Stipends were key to continued professional development and degree attainment

# Participant Highlights (CARES Plus Participation Survey)

#### **Satisfaction**

Over 4,300 participants responded to an online CARES Plus Participant Satisfaction Survey for FY 2015–16. Surveys in previous years showed similar results to those reported below. Most participants found CARES Plus to be very useful for their professional development. Participants believed the effect of their CARES Plus experience on the children in their care would be "very positive" (92 percent), believed "very much" they were a better teacher because of their participation in CARES Plus (80 percent), and believed CARES Plus was a "very useful" learning experience for meeting their professional development goals (85 percent). In addition, 83 percent of participants thought the CARES Plus program would "very much" help them continue working in the ECE field instead of another field of employment, and 95 percent expected to be working in the early care and education field in the next five years. Of the participants who completed the online CORE coursework, 83 percent rated *Looking at CLASSrooms* as "very useful," and 84 percent rated *Introduction to the CLASS* as "very useful."

#### MTP

Participants in the MTP program reported the most beneficial features were the one-onone coaching (75 percent), viewing edited video clips (73 percent), and biweekly conference calls (67 percent). Most participants (80 percent) reported their MTP coach was very helpful.

#### Challenges

Most of the participants completing the survey completed the CARES Plus program. However, some participants were unable to complete the program. Common reasons for withdrawal included schedule conflicts, family reasons, inaccessible training or education, and training or education not meeting professional development needs.

#### **Smoking Cessation**

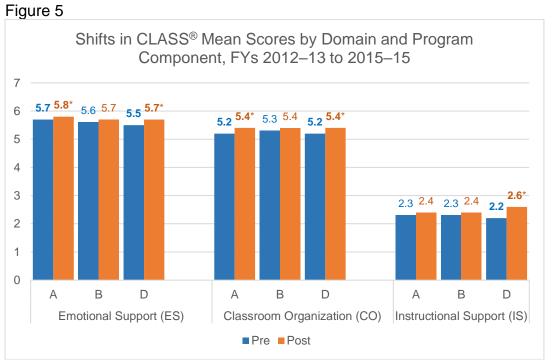
Most participants who took the smoking cessation online training, *Kids and Smoke Don't Mix,* thought information provided about effects of smoking on children was "very useful" (79 percent). Participants reported the online training might lead them to have the confidence and knowledge needed to talk with parents about the effects of smoking (53 percent) or talk to parents about resources for quitting smoking (31 percent). In addition, participants reported the online training might lead them to talk with coworkers about the effects of smoking (51 percent), precautions to take if they do smoke (29 percent), and avoiding smoking with children present or where they can see them (19 percent).

# **Teacher-Child Interactions**

#### Improvement in CLASS® Mean Scores

For components A, B, and D (or MTP), pre- and post- CLASS mean scores were compared in the three CLASS domains: Emotional Support (ES), Classroom Organization (CO), and Instructional Support (IS). Paired sample t-tests assessed changes in pre to post mean observations for each domain. In addition, Cohen's *d* effect sizes assessed the magnitude of the effect for shift in CLASS mean scores.

Participants in Component A (for combined FYs 2012–13 and 2013–14)<sup>1</sup> showed significant improvement in pre to post CLASS mean scores for domains ES and CO. Component B (for combined FYs 2012–13 and 2013–14) participants showed no significant CLASS mean score improvement for any domain. Given that participants in Component B could take any college course leading to a degree in the field, content may not have been related to child development or information likely to affect CLASS<sup>®</sup> scores. As such, Component B served as a pseudo-control group. Component D participants showed significant improvement in all three domains of ES, CO, and IS, (combined FYs 2012–13 through 2015–16), indicating that component D participants demonstrated a significant improvement in teacher effectiveness as measured by CLASS (see Figure 5). Component D participants increased their CLASS scores in the domains ES and CO by almost a quarter point, and IS scores by 0.4. Effect sizes (Cohen's *d*) for these differences showed small to moderate effects.<sup>2</sup> Component D showed the largest effect sizes compared to either component A or B (see Figure 6).

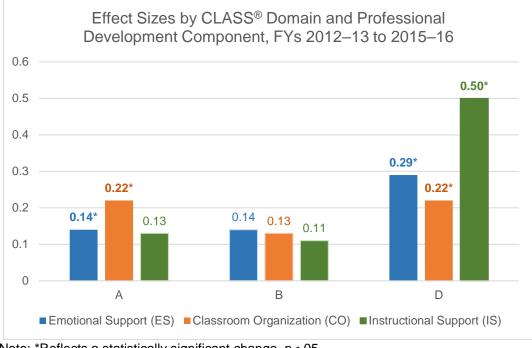


Note: \*Reflects a statistically significant change, p<.05. Component A n=153, Component B n=167, and Component D n=851

<sup>&</sup>lt;sup>1</sup> CLASS observations for Components A and B were conducted through FY 2013–14. Only Component D (or MTP) CLASS observations were conducted in FYs 2014–15 and 2015–16.

<sup>&</sup>lt;sup>2</sup> Effect size measures the magnitude of change to complement null hypothesis significance testing. Cohen's *d*, the standardized difference in means, is a common measure of effect size. Effect sizes in this report are Cohen's *d* calculated with the pre-test standard deviation. Conventional interpretation of Cohen's *d* is small (0.2), medium (0.5), and large (0.8 or higher) (Cohen 1988, 1992).





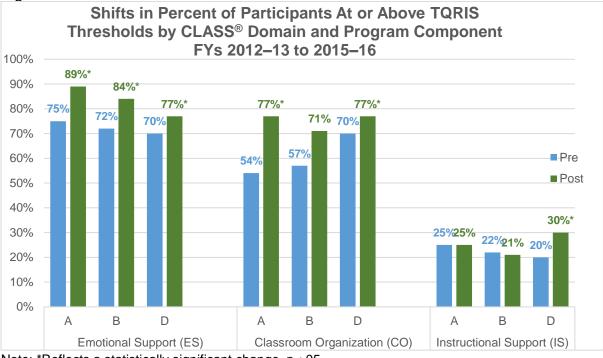
Note: \*Reflects a statistically significant change, p<.05. Component A n=153, Component B n=167, and Component D n=851

# Improvement in CLASS® Scores Relative to Standards

Examining changes in the proportion of sampled participants who met the Tiered Quality Rating and Improvement System (TQRIS) standards set for RTT–ELC (California Department of Education, 2014) is another approach to evaluating CLASS scores. CLASS domain standards used were ES = 5, CO = 5, and IS = 3. Components A, B, and D, for FYs 2012–13 to 2015–16 were included in these analyses. For this analysis, McNemar's test statistic compared changes in the proportions of participants for pre and post at or above the TQRIS standard. McNemar's test assesses significant change in the proportion of participants from pre to post observation by comparing the number of participants who improved (going from below TQRIS to meeting TQRIS standards) to participants who did worse (going from meeting TQRIS to below TQRIS standards). For these analyses, difference in proportions serves as the effect size showing the amount and direction of change.

Component A showed significant improvement in the proportion of participants at or above TQRIS standards from their pre to post CLASS observations for the ES and CO domains. Component B showed significant change only for the ES domain. Component D showed significant improvement in all three domains: ES, CO, and IS (see Figure 7).





Note: \*Reflects a statistically significant change, p<.05. Component A n=153, Component B n=167, and Component D n=851

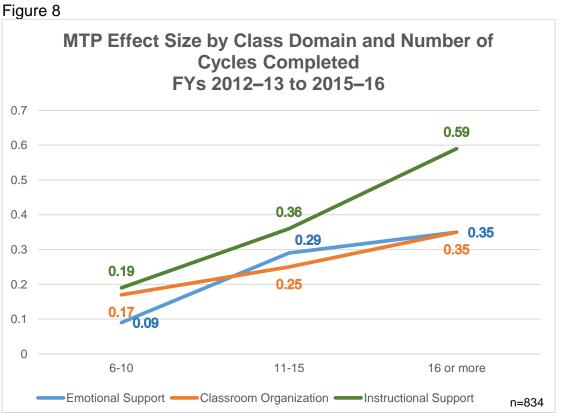
# MyTeachingPartner (MTP): CLASS Scores Change by Participant Characteristics

Additional analyses explored changes in CLASS scores between pre and post observations by participant characteristics. Specifically, analyses compared CLASS scores by the number of MTP cycles completed (reported by coaches), years in the field, level of education, and primary position (reported by participants).

Between FYs 2012–13 and 2015–16, 851 early childhood educators self-selected to participate in the MTP program. Seventeen participant records were excluded from the subsequent analyses due to missing data. Of the remaining 834 participants, the majority of participants identified themselves as Hispanic/Latino (42 percent), White (28 percent) or Asian (13 percent). Males made up one percent of the sample. By position, teachers comprised 59 percent of the participants, 18 percent were assistant teachers, and 19 percent were directors or site supervisors. Remaining participants did not report their position. The majority of participants worked in child care centers (73 percent), whereas 25 percent worked in a family child care home setting. The remaining participants identified as working in another type of program. All participants had at least a high school diploma with most having a college degree (28 percent associate's degree; 38 percent bachelor's degree; 9 percent master's degree); 23 percent had completed some college courses but not a degree.

#### **Number of MTP Cycles Completed**

The number of MTP cycles completed by participants (ranging from 6 to 19 cycles) was grouped into intervals of five: 6–10 cycles (n = 188), 11–15 cycles (n = 256), and 16 or more cycles (n = 390). None of the participants completed less than six cycles. Single sample t-tests assessed whether the CLASS scores for each of the three domains were different between pre and post observation based on the number of cycles completed. With the exception of the change in ES scores for individuals completing ten or fewer cycles, the number of MTP cycles across all domains was statistically significant (see Table C10). The pattern of effect sizes suggests CLASS scores improved as participants completed more cycles, especially in the IS domain (see Figure 8). The effect of the program was small (Cohen's d < 0.20) when ten or fewer cycles were completed, regardless of domain.



Note: Statistically significant differences for effect sizes within each domain were determined by nonoverlapping 95 percent confidence intervals.

**Emotional support**: The effect size for 16 or more cycles was significantly larger than 6–10 cycles. Other differences were not significant. **Classroom Organization**: Effect size for 16 or more cycles was significantly larger than 6–10 cycles. Other differences were not significant. **Instructional Support**: Each cycles grouping was significantly different from one another.

# **Participant Experience**

Experience was defined as the number of years in the field, and was grouped into tenyear intervals: 0–9 years (n = 339), 10–19 years (n = 311), and 20+ years (n = 184). CLASS scores improved across all groups and all domains. The largest effect size was associated with Instructional Support scores (see Figure 9). However, effect size for improvement in CLASS scores did not differ significantly by number of years in the field.

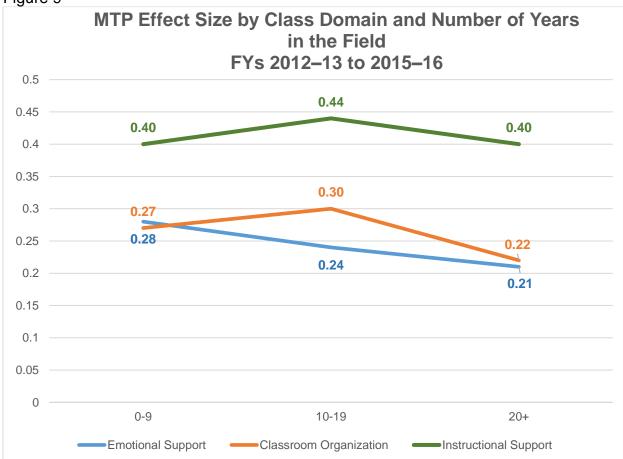


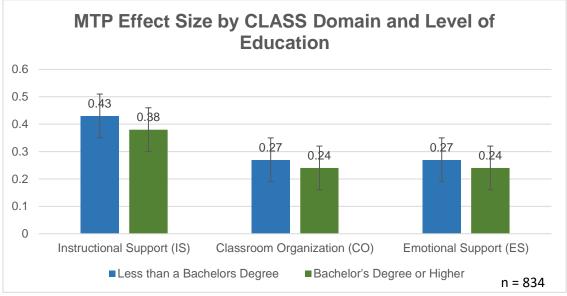
Figure 9

Note: Statistically significant differences for effect sizes within each domain were determined by nonoverlapping 95 percent confidence intervals. No significant differences were observed in any of the domains.

### Participant Level of Education

All participants, regardless of education level, benefited from participating in the MTP program (single sample t-tests). Individuals with more education (bachelor's degree or higher, n = 385) and those with less than a bachelor's degree (single sample t-test, n = 449) improved across all three domains (see Table C12). While the effect sizes were larger for individuals with less than a bachelor's degree when compared with BA or higher, the difference was not statistically significant (see Figure 10). Of the three domains, Instructional Support showed the largest effect size.



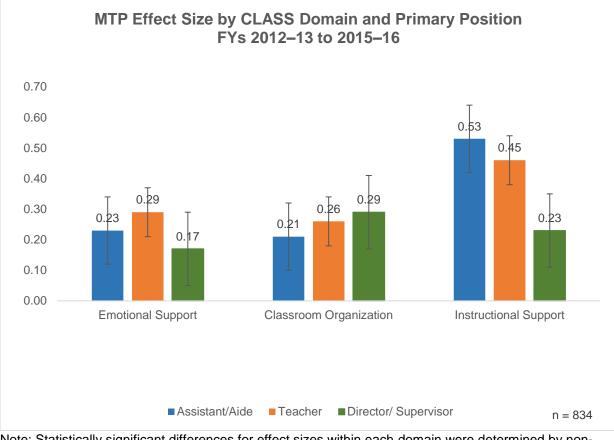


Note: Statistically significant differences for effect sizes within each domain were determined by nonoverlapping 95 percent confidence intervals. No differences were significant within any of the domains.

### **Participant Primary Position**

Primary position was grouped into three categories: Assistant Teacher/Teacher Aide (n = 148), Teacher/Lead Teacher/Master Teacher (n = 496), and Director/Owner/Site Supervisor (n = 161). Twenty-nine individuals did not report a primary position, and were not included in this analysis. Single sample t-statistics suggest all groups improved from pre to post observations across all three domains (see Table C13). Effect sizes for CO and ES for all positions were small (see Figure 11). However, effect sizes suggest the MTP program resulted in the greatest improvement in the IS domain. Teacher Assistants/Aides and Teachers improved IS scores significantly more than Directors/Supervisors. Effect sizes for ES and CO did not differ by position type.





Note: Statistically significant differences for effect sizes within each domain were determined by nonoverlapping 95 percent confidence intervals. **Emotional Support:** The effect size for Teachers was significantly higher than for Directors/Supervisors. Other differences were not significant. **Classroom Organization**: No differences were significant. **Instructional Support**: The effect size for both Assistants/Aides and Teachers was significantly higher than for Directors/Supervisors. Other differences were not significant.

# **Summary and Conclusions**

CARES Plus provided professional development to participants working in California's early care and education workforce. A large number of participants received ECE trainings, college coursework toward obtaining a degree, or coaching.

CARES Plus County Lead Agencies collaborated with other local partners to assist in program implementation. The most common partners included county offices of education and Head Start/Early Head Start. These collaboration efforts included additional funding, professional growth advising, and outreach and recruitment efforts.

The majority of program participants reported benefiting from CARES Plus. Specifically, participants reported the program would improve the experiences of children in their

care and they were better teachers as a result of their participation. Participants also reported CARES Plus helped them to obtain their professional development goals, and were more likely to stay in the field.

Improvement in CLASS scores and an increase in the proportion of participants who met TQRIS standards were indicators of improved teacher interactions with students. Overall, for improvements in the ES or CO domains, CDE-approved training (Component A) provided better results. For improvements in the IS domain, coaching in MTP (Component D) provided the best results.

Combined data for FYs 2012–13 and 2013–14 showed no significant pre-post change in CLASS scores for participants in Component B (higher education coursework). Given that Component B allowed a wide range of coursework toward a degree, it is not surprising that CLASS scores did not change significantly. Participants could take any college course even if not related to child development. While not a true control group, lack of effects observed for the Component B group suggests significant changes in CLASS scores for participants in Components A and D may be related to training and coaching focused on effective interactions.

One-on-one coaching offered in MTP consistently showed significant improvement in the IS domain. The MTP coach provided mentoring for each participant's individualized plan, which frequently included IS as a primary focus. In MTP, individuals in non-administrative positions appeared to benefit the most. The findings also suggest dosage matters: a minimum of ten coaching cycles should be completed for meaningful effects to be observed. Participants who completed more than 15 coaching cycles showed substantial improvement in the IS domain. These findings provide additional evidence demonstrating MTP can be a beneficial tool to improving early childhood educators' interactions with children. Participants found the training to be useful and rated the program highly.

# **Human Subjects Protection**

The Committee for the Protection of Human Subjects, the state government institutional review board, approved CARES Plus evaluation activities for Round 1 (Protocol ID 13-01-1037) and Round 2 (Protocol ID 13-05-1206).

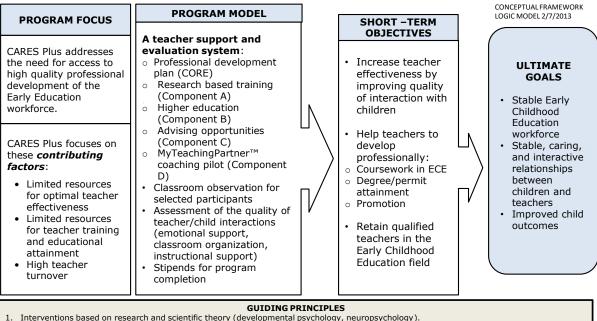
# **Acknowledgments**

First 5 California acknowledges the contributions of staff at more than 40 CARES Plus participating Lead Agencies, MTP coaches and CLASS observer/coders, as well as staff at the Child Development Training Consortium (Yosemite Community College District). Many program coordinators, local evaluators, and other staff contributed to the program at the county level. At First 5 California, key program staff included Lupe Almer, Lori Gladding, Mary Anne Riehl-Campos, and Kristin Torres working with program managers Diane Levin, Sarah Neville-Morgan, Desiree Soto, and Debra Silverman. Key contributors to the CARES Plus data system included Richard Flores, Riley Henderson, Nicole McClain, Margaret O'Neil (Infiniti Consulting Group) and Paul Waters.

# Appendix A: CARES Plus Logic Model

# Comprehensive Approaches to Raising Educational Standards (CARES) Plus

Promoting high quality interaction between teachers and children in pre-school\*



Interventions based on research and scientific theory (developmental psychology, neuropsychology).
 Curriculum meeting standards of California Department of Education: *California Infant/Toddler and Preschool Learning Foundations* and *California Preschool Curriculum Framework*

3. First 5 Principles on Equity: Inclusive governance and participation, access to services, legislative and regulatory mandates, results-based accountability.

Cost-effective quality improvement of preschool learning environments.

\* Teacher effectiveness is one of the most important factors for quality of early learning programs. "The relationship a child has with a teacher or caregiver...is the central most critical component of child care quality" (US Department of Education).

# **Appendix B: Evaluation Methodology**

The CARES Plus evaluation sought to answer two key research questions: 1) Does training provided by CARES Plus improve teacher effectiveness in the classroom? And 2) Does improvement in teacher effectiveness vary by the type of professional development chosen (Components A, B, or D)? Sources of data included: Classroom observations of teacher interactions with students in the classroom guided by the CLASS<sup>®</sup> tool, an online CARES Plus participant satisfaction survey, and employment and demographic information collected during enrollment.

#### Methodology

Quality of classroom interaction was assessed with the Pre-K version of the CLASS instrument developed at the University of Virginia (Pianta et al. 2008). In published research, high quality of classroom interaction between teachers and children, as assessed by the CLASS instrument, has been linked to improved child outcomes in the domains of social-emotional, language, and mathematics development (Mashburn et al. 2008, Burchinal et al. 2010, Early et al. 2014, Sabol et al. 2013). The Pre-K CLASS instrument addresses three domains of teacher-child interaction: Emotional Support (ES), Classroom Organization (CO), and Instructional Support (IS). Scores for each of the three domains are constructed based on the quality of interaction in underlying dimensions: ES (dimensions: Positive Climate, Negative Climate, Teacher Sensitivity, Regard for Student Perspectives), CO (dimensions: Behavior Management, Productivity, Instructional Learning Formats), and IS (dimensions: Concept Development, Quality of Feedback, Language Modeling). Scoring is completed at the dimension level using a 7-point scale with ranges considered as low (1-2), middle (3-5), and high (6-7) (Hamre et al. 2009). For CARES Plus, observations were coded for interaction of the individual program participant with children in the classroom, rather than the standard use of CLASS to code interaction of all teacher/caregiver adults with children in the classroom.

For this evaluation, certified observers, hired through the Child Development Training Consortium, used the CLASS instrument to code teacher-child interactions in three domains: ES, CO, and IS. For CARES Plus, the CLASS instrument was used to code observations of the focal program participant in a pre-post design: pre observations were to be made in the fall of each program year, and post observations were to be made in the spring of each program year. To complete CLASS observations, either trained and certified observers physically visited classrooms to observe in-person and score interactions (i.e., live observation), or program participants recorded video segments of their own classroom activity to be scored later by a certified CLASS observer (i.e., video observation). Participants in three program components of CARES Plus were assessed using CLASS: a statewide random sample comprised Components A and B, and for Component D, all participants were observed. For FYs 2012–13 to 2015–16 combined, there were pre-post observation data for 153 participants in Component A, 167 participants in Component B, and 851 participants in Component D.

During the first year of data collection, FY 2011–12, logistical difficulties in implementing the program and its evaluation produced small sample sizes for each program component and created a short timeframe between pre- and post-intervention observations (approximately two to three months, mostly during spring 2012). During the second year of data collection, FY 2012–13, the process of program enrollment and sampling for CLASS observations for participants in program components A and B went more smoothly. As a result, during the second year, sample sizes were larger and the time window between pre- and post-intervention observations was approximately three to six months.

For the purpose of analyses presented here, 95 percent confidence level (p<.05) is defined as statistically significant using a paired t-test for pre- and post-observation scores in each CLASS domain (Table B1). Because sample size can influence statistical tests of significance, effect sizes assessed the magnitude of the shift in pre- and post-observation scores (Ellis 2010, Grissom and Kim 2005, Morris and DeShon 2002). For shift in means, conventional interpretation of effect size is small at 0.2, medium at 0.5, and large at 0.8 (Cohen 1988, 1992). Thresholds, or cut-points, for percentage shifts in CLASS scores were based on the Tiered Quality Rating and Improvement System (TQRIS) implementation guide for California's Race to the Top–Early Learning Challenge, using the 4-point value for CLASS scores in the "Effective Teacher-Child Interactions" element (California Department of Education 2014). Given available evidence, CLASS scores of 5 in ES, 5 in CO, and 3 in IS are likely thresholds for improved child outcomes. Because both pre- and post-observations shared the same denominator of participants, McNemar's test (McNemar 1947) was used to assess significance of shifts in the percentage of participants meeting thresholds (Table B2).

Fall and spring CLASS observations measured changes in the quality of classroom interactions, which may be attributable to the different components of the CARES Plus professional development system. Participants self-selected into the CARES Plus components based on their personal professional development goals, resulting in a number of natural treatment groups useful for making comparisons across components.

# Sampling

First 5 California selected a stratified random sample of CARES Plus participants for Components A and B during FYs 2012–13 and 2013–14. The number of participants in the sample from Components A and B was stratified in relation to the county's proportion of total CARES Plus participants and the age group the participant typically works with (i.e., pre-kindergarten or toddlers). Age groups determined appropriate CLASS<sup>®</sup> tools (i.e., CLASS Pre-K and CLASS Toddler). All participants participating in component D received pre and post CLASS observations.

#### **Results**

Pre and post CLASS<sup>®</sup> mean scores for Components A, B, and D (or MTP) were compared for significant shifts in means for the three CLASS domains: ES, CO, and IS. Significant t-test results indicated a meaningful shift. Cohen's *d* effect sizes showed the magnitude or strength of effect for each shift in CLASS means. Results are shown in Tables B1 through B2.

### **CLASS Score Summary Highlights**

Component <sup>a, c</sup>	CLASS Domain	Pre	Post	Diff.	t-test p value	SD <sup>pre</sup>	Effect size <sup>b</sup>
A	Emotional Support	5.7	5.8	0.1	0.008	0.7	0.14
(n=153)	Classroom Organization	5.2	5.4	0.3	0.0003	0.9	0.22
	Instructional Support	2.3	2.4	0.1	n.s.	0.8	0.13
В	Emotional Support	5.6	5.7	0.1	n.s.	0.7	0.14
(n=167)	Classroom Organization	5.3	5.4	0.1	n.s.	0.8	0.13
	Instructional Support	2.3	2.4	0.1	n.s.	0.9	0.11
D (MTP)	Emotional Support	5.5	5.7	0.2	0.0001	0.7	0.29
(n=851)	Classroom Organization	5.2	5.4	0.2	0.0001	0.9	0.22
	Instructional Support	2.2	2.6	0.4	0.0001	0.8	0.5

Table B1: Shifts in Mean Scores by Component and Domain

a. Component A includes participants in CORE + A, CORE + A + B, A, A/C; Component B includes participants in CORE + B, B, Los Angeles CORE+3 categorized as CORE + B; and Component D (or MTP), includes participants in CORE + A + C + D, CORE + A + D, CORE + B + D, CORE + C + D, CORE + D, A/D, B/D, C/D, D.

b. Cohen's *d* effect sizes were calculated using standard deviation of the pre-test. Strength of effect sizes are 0.2 (small), 0.5 (medium), and 0.8 (large).

c. Components A and B based on CLASS scores for fiscal years 2012–13 and 2013–14, Component D based on fiscal years 2012–13 to 2015–16

Table B2: Shifts in the Percent of Participants Meeting TQRIS Standards by CARES Plus Component and CLASS Domain

Component <sup>a,</sup> <sup>b</sup>	CLASS Domain	Pre	Post	Diff.	McNemar test	р
А	Emotional Support	83%	93%	10%	9.1	0.003
(n=153)	Classroom Organization	63%	80%	17%	13.5	<0.001
	Instructional Support	20%	24%	4%	0.9	ns
В	Emotional Support	80%	89%	9%	7.1	0.011
(n=167)	Classroom Organization	66%	73%	7%	3.4	ns
	Instructional Support	22%	27%	5%	1.3	ns
D	Emotional Support	79%	84%	5%	8.9	0.004
(n=851)	Classroom Organization	65%	72%	7%	12.6	<0.001
	Instructional Support	16%	32%	16%	79.7	<0.001

a. Component A includes participants in CORE + A, CORE + A + B, A, A/C; Component B includes participants in CORE + B, B, Los Angeles CORE+3 categorized as CORE + B; and Component D (or MTP), includes participants in CORE + A + C + D, CORE + A + D, CORE + B + D, CORE + C + D, CORE + D, A/D, B/D, C/D, D. b. Components A and B based on CLASS scores for fiscal years 2012–13 and 2013–14, Component D based on fiscal years 2012–13 to 2015–16

# **Appendix C: Tables and Figures**

	1	0 2010 10				
Component	FY 2012– 13	FY 2013– 14	FY 2014– 15	FY 2015– 16	Combined FYs	Percent in Component
CORE	3,849	3,610	3,019	2,586	13,064	-
Α	1,397	1,776	1,983	1,985	7,141	32%
В	3,356	2,970	3,119	3,126	12,571	56%
С	151	202	219	169	741	3%
D	463	356	496	657	1,972	9%
Total Enrolled A,B,C,D	5,367	5,304	5,817	5,937	22,245	100%
Total Enrolled with CORE	9,216	8,914	8,836	8,523	35,489	-
Total Enrolled Participants	6,133	6,277	6,747	6,675	25,832	-

Table C1: Number of Participants Initially Enrolled in CARES Plus by Program Component, FYs 2012–13 to 2015–16

Note: Participant counts are for each component they enroll in (e.g., a participant enrolling in both CORE and Component B is counted in each component). The total participant count summed across components is larger than the number of actual participants.

		,				
Program Enrollment Status	2012-13	2013-14	2014-15	2015-16	Total	Percent
Total number of participants who <b>completed</b> by						
program year	4,162	4,361	4,685	4,579	17,787	68.9%
Total number of participants who withdrew by program						
year	1,971	1,903	2,057	2,096	8,027	31.1%
Other	-	13	5	-	18	0.0%
Total number of participants who <b>enrolled</b> by program						
year	6,133	6,277	6,747	6,675	25,832	100.0%
Percent withdrew from program	32.1%	30.3%	30.5%	31.4%	31.1%	
Gender	2012-13	2013-14	2014-15	2015-16	Total	Percent
Female	5,985	6,058	6,569	6,491	25,103	97.2%
Male	113	133	164	170	580	2.2%
Decline to State	28	3	14	14	59	0.2%
Blank	7	83	-	-	90	0.3%
Total	6,133	6,277	6,747	6,675	25,832	100.0%
Race/Ethnicity	2012-13	2013-14	2014-15	2015-16	Total	Percent
Hispanic or Latino	2,938	3,184	3,403	3,445	12,970	50.2%
White	1,491	1,377	1,460	1,369	5,697	22.1%
Asian	590	570	773	867	2,800	10.8%
Black or African American	570	607	640	549	2,366	9.2%
Alaska Native or American Indian	57	76	77	75	285	1.1%
Pacific Islander	34	29	34	42	139	0.5%
Other	306	222	213	204	945	0.6%
Decline to State	104	107	141	121	473	3.7%
Blank	43	105	6	3	157	1.8%
Total	6,133	6,277	6,747	6,675	25,832	100.0%
Education Level	2012-13	2013-14	2014-15	2015-16	Total	Percent
Less than High School	144	141	150	179	614	2.4%
High School Diploma or GED	408	242	343	331	1,324	5.2%
Some College	1,943	2,375	2,631	2,699	9,648	37.3%
Associate's Degree	1,690	1,641	1,668	1,606	6,605	25.6%
Bachelor's Degree	1,616	1,537	1,632	1,568	6,353	24.6%
Graduate Degree	302	303	277	266	1,148	4.4%
Blank	30	38	46	26	140	0.5%
Total	6,133	6,277	6,747	6,675	25,832	100.0%

Table C2. Participant Enrollment and Characteristics, FYs 2012-13 to 2015-16

County	2012-13		2014-15		Total
Alameda	201	311	390	377	1,279
Alpine	6	4	4	5	19
Amador	-	-	_	10	10
Calaveras	-	_	_	4	4
Colusa	12	13	12	12	49
Contra Costa	201	246	274	304	1,025
Del Norte	34	_	-	-	34
El Dorado	106	120	133	98	457
Fresno	247	263	286	388	1,184
Humboldt	69	-	-	-	69
Inyo	-	29	29	27	85
Lake	56	55	68	50	229
Los Angeles	1,165	1,191	1,219	1,105	4,680
Madera	7	15	65	51	138
Marin	74	45	43	33	195
Mendocino	72	13	15	14	114
Merced	138	140	171	174	623
Modoc	35	22	21	25	103
Mono	30	24	31	29	114
Napa	66	49	58	52	225
Nevada	-	-	-	33	33
Orange	265	231	266	208	970
Riverside	445	456	431	442	1,774
Sacramento	135	140	144	162	581
San Benito	34	43	31	35	143
San Bernadino	493	868	575	472	2,408
San Francisco	97	117	142	113	469
Santa Barbara	192	216	276	157	841
Santa Clara	1,131	754	1,087	1,329	4,301
Shasta	93	93	100	109	395
Siskiyou	26	20	26	19	91
Solano	147	178	205	240	770
Sonoma	131	199	244	159	733
Stanislaus	132	77	-	-	209
Sutter	-	18	35	38	91
Tehama	34	32	40	34	140
Tuolumne	-	26	36	45	107
Ventura	176	185	174	195	730
Yolo	83	68	82	86	319
Yuba	-	16	34	41	91
Total	6,133	6,277	6,747	6,675	25,832

Table C3: Total CARES Plus Participants by County, FYs 2012-13 to 2015-16

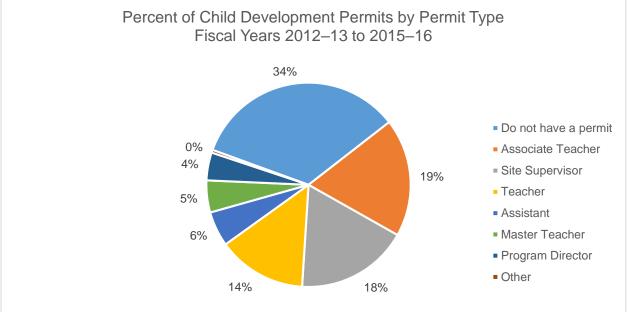
Primary Language	FY 2012–13	FY 2013–14	FY 2014–15	FY 2015–16	Language Totals	Percent
English	3,931	4,100	4,201	4,060	16,292	63.1%
Spanish	1,591	1,596	1,771	1,775	6,733	26.1%
Other	336	240	326	374	1,276	4.9%
Vietnamese	66	46	83	88	283	1.1%
Cantonese	11	50	98	119	278	1.1%
Mandarin	32	53	61	69	215	0.8%
Filipino (Pilipino or Tagalog)	50	47	60	51	208	0.8%
Armenian	31	53	51	39	174	0.7%
Arabic	5	19	26	24	74	0.3%
Hmong	3	14	24	21	62	0.2%
Punjabi	4	21	19	18	62	0.2%
Chinese	52	6	1	-	59	0.2%
Korean	8	4	10	18	40	0.2%
Japanese	7	7	8	12	34	0.1%
Russian	1	9	8	7	25	0.1%
Unknown	5	12	-	-	17	0.1%
Total	6,133	6,277	6,747	6,675	25,832	100.0%

Table C4: Primary Languages, CARES Plus Participants, FYs 2012–13 to 2015–16

Primary Language Spoken in Classroom	FY 2012–13	FY 2013–14	FY 2014–15	FY 2015–16	Language Totals	Percent
English	3,882	5,045	5,311	5,231	19,469	80.7%
Spanish	637	854	998	1,019	3,508	14.5%
Other	124	105	182	195	606	2.5%
Cantonese	6	18	67	71	162	0.7%
Mandarin	19	42	47	45	153	0.6%
Armenian	26	42	38	25	131	0.5%
Korean	2	2	5	11	20	0.1%
Vietnamese	6	2	7	5	20	0.1%
Japanese	4	4	4	3	15	0.1%
Russian	2	5	7	1	15	0.1%
Chinese	11	-	-	-	11	0.0%
Arabic	1	1	2	2	6	0.0%
Filipino (Pilipino or Tagalog)	1	1	2	2	6	0.0%
Punjabi	-	-	2	2	4	0.0%
Hmong	-	-	-	1	1	0.0%
Total	4,721	6,121	6,672	6,613	24,127	100.0%

Table C5: Primary Languages Spoken in Classroom, FYs 2012–13 to 2015–16

### Table C6



n=25,357

Child Development Permit	FY 2012–13	FY 2013–14	FY 2014–15	FY 2015–16	Permit Totals (N)	Permit Totals (Percent)
Do not have a permit	2,003	1,987	2,300	2,313	8,603	33.9%
Associate Teacher	1,121	1,216	1,258	1,146	4,741	18.7%
Site Supervisor	1,182	1,046	1,144	1,149	4,521	17.8%
Teacher	802	836	941	992	3,571	14.1%
Assistant	312	327	371	395	1,405	5.5%
Master Teacher	286	335	351	313	1,285	5.1%
Program Director	299	241	281	298	1,119	4.4%
Teaching Credential Plus 12 ECE/CD units	-	1	31	17	49	0.2%
Children's Center Supervisor Permit	-	-	21	14	35	0.1%
Children's Center Instructional Permit	-	-	13	15	28	0.1%
Totals	6,005	5,989	6,711	6,652	25,357	100.0%

Position	Number	Mean
Director-Multi-Site	31	21
Executive Director	6	20
Director-Single Site	308	18
Site Supervisor	677	17
Administrator	202	16
Teacher/Director	733	15
Assistant Director	151	14
Master/Lead Teacher	310	13
Specialized Teaching Staff	83	12
Unknown	61	11
Owner/Operator	3,434	12
Teacher/Lead Teacher	9,446	12
Professional Support Staff	68	11
Teacher	898	11
Other FCC	157	11
Other	912	10
Assistant Teacher/Teacher Aide	7,118	9
Assistant	1,028	5

Table C7: Number of Years in the ECE Field by Position

Primary Position	FY	FY	FY	FY	Tatala	Deveent
Primary Position	2012–13	2013–14	2014–15	2015–16	Totals	Percent
Teacher/Lead Teacher	1,516	2,553	2,738	2,639	9,446	36.9%
Assistant Teacher/Teacher Aide	1,475	1,790	1,895	1,958	7,118	27.8%
Owner/Operator	849	787	907	891	3,434	13.4%
Assistant	95	222	342	369	1,028	4.0%
Other	345	193	184	190	912	3.6%
Teacher	881	7	6	4	898	3.5%
Teacher/Director	116	229	207	181	733	2.9%
Site Supervisor	112	209	184	172	677	2.6%
Master/Lead Teacher	300	5	3	2	310	1.2%
Director-Single Site	62	84	77	85	308	1.2%
Administrator	198	0	2	2	202	0.8%
Other FCC	18	47	51	41	157	0.6%
Assistant Director	25	41	40	45	151	0.6%
Specialized Teaching Staff	12	29	20	22	83	0.3%
Professional Support Staff	7	20	26	15	68	0.3%
Unknown	45	16	-	-	61	0.2%
Director-Multi-Site	6	7	8	10	31	0.1%
Executive Director	1	3	1	1	6	0.0%
Totals	6,063	6,242	6,691	6,627	25,623	100.0%

Table C8: Primary Positions, FYs 2012–13 to 2015–16

Table C9: Number of Participants by Site Program Type, FYs 2012–13 to 2015–16

Program Type	FY 2012–13	FY 2013–14	FY 2014–15	FY 2015–16	Total	Percent
Licensed Child Care Center/Early Childhood Program	4,715	4,883	5,097	5,063	19,758	77.5%
Licensed Family Child Care Home	1,137	1,111	1,350	1,339	4,937	19.4%
License-Exempt Center or School- Age Program	128	144	178	174	624	2.4%
Other	23	47	66	51	187	0.7%
Totals	6,003	6,185	6,691	6,627	25,506	100.0%

	Instru	ctional Su	Classroom Organization			Emotional Support			
	6–10	11–15	16 or more	6–10	11–15	16 or more	6–10	11–15	16 or more
Mean	0.21	0.33	0.53	0.19	0.20	0.26	0.09	0.19	0.23
t	2.52	5.71	11.48	2.36	3.93	6.84	1.22	4.60	6.91
р	<0.05	<.001	<.001	<.05	<.001	<.001	NS	<.001	<.001
Cohen's d	0.19	0.36	0.59	0.17	0.25	0.35	0.09	0.29	0.35
Lower CI	0.02	0.25	0.50	0.01	0.15	0.27	-0.52	0.20	0.29
Upper CI	0.35	0.47	0.68	0.33	0.35	0.42	0.23	0.37	0.42

Table C10: Class Difference Scores (Post-Test Score – Pre-Test Score) by Number of Coaching Cycles

*n* = 834

Table C11: CLASS Difference Scores (Post-Test Score – Pre-Test Score) by Experience

	Instructional Support				Classroom Organization				Emotional Support			
	0–9	10–19	20–29	30+	0–9	10–19	20–29	30+	0–9	10–19	20–29	30+
	years	years	years	years	years	years	years	years	years	years	years	years
Mean	0.36	0.44	0.41	0.26	0.22	0.26	0.21	0.12	0.20	0.19	0.19	0.07
t	7.39	7.70	4.40	1.87	5.88	5.15	2.83	0.87	5.19	4.30	3.03	0.49
р	<.001	<.001	<.001	NS	<.001	<.001	<.01	NS	<.001	<.001	<.01	NS
Cohen's d	0.40	0.44	0.39	0.28	0.27	0.30	0.25	0.13	0.28	0.24	0.27	0.08
Lower CI	0.30	0.33	0.21	0.01	0.19	0.20	0.10	-0.14	0.21	0.15	0.15	-0.18
Upper CI	0.49	0.55	0.57	0.54	0.36	0.39	0.39	0.39	0.36	0.33	0.39	0.33

*n* = 834

	Instruction	al Support	Class Organi		Emotional Support		
	Less than a BA	BA or Higher	Less than a BA	BA or Higher	Less than a BA	BA or Higher	
Mean	0.41	0.38	0.24	0.20	0.20	0.18	
t	9.07	7.35	5.88	4.76	5.52	4.57	
р	<.001	<.001	<.001	<.001	<.001	<.001	
Cohen's d	0.43	0.38	0.27	0.24	0.27	0.24	
Lower CI	0.34	0.28	0.19	0.16	0.20	0.17	
Upper CI	0.52	0.48	0.36	0.32	0.34	0.32	

Table C12: CLASS Difference Scores (Post-Test Score - Pre-Test Score) by Level of Education

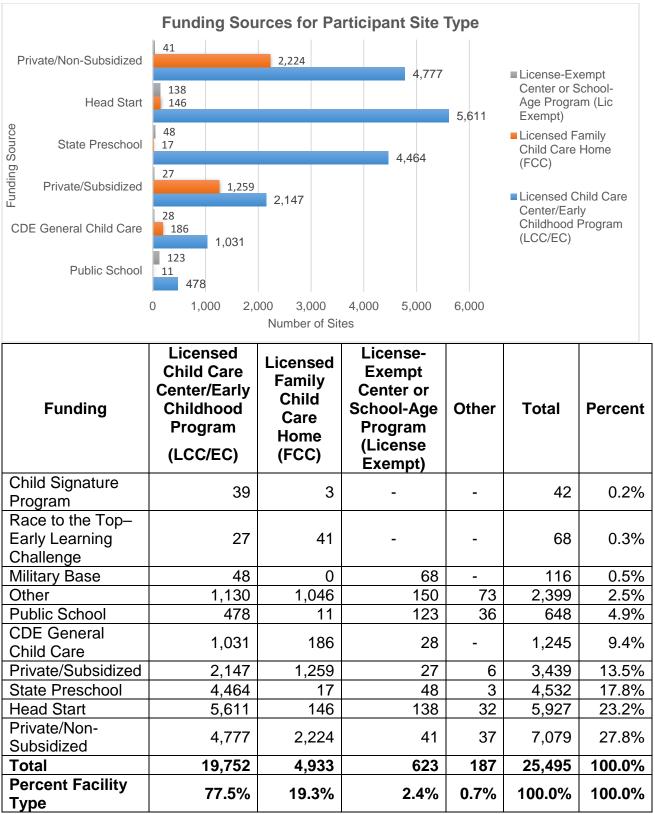
*n* = 834

Table C13: CLASS Difference Scores (Post-Test Score – Pre-Test Score) by Primary Position

	Instru	uctional Su	upport	Classr	oom Orga	nization	Emotional Support			
	Assistant/ Aide	Teacher	Director/ Supervisor	Assistant/ Aide	Teacher	Director/ Supervisor	Assistant/ Aide	Teacher	Director/ Supervisor	
Mean	0.40	0.44	0.26	0.16	0.22	0.28	0.16	0.21	0.14	
t	6.37	10.10	2.86	2.58	5.94	3.67	2.83	6.47	2.16	
р	<.001	<.001	<.01	<.01	<.001	<.001	<.01	<.001	<.05	
Cohen's d	0.53	0.45	0.23	0.21	0.26	0.29	0.23	0.29	0.17	
Lower CI	0.41	0.36	0.05	0.09	0.19	0.14	0.12	0.22	0.05	
Upper CI	0.65	0.54	0.40	0.33	0.34	0.44	0.34	0.35	0.30	

*n* = 805





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