

Early Childhood Education Technical Assistance and Workforce Development: Current Practice and Future Directions

A literature scan to inform First 5 Monterey County's Strategic Plan Development

May 2016

First 5 Monterey County (F5MC) has a long history of supporting work to enhance the quality of early childhood education in Monterey County, particularly through initiatives funded under Vision 2: Access to High Quality Early Care and Education. This literature scan is an internal document intended to support F5MC's current strategic planning process. The document benchmarks the Commission's current approaches in two funding initiatives—early childhood education (ECE) Technical Assistance to Centers and the Workforce Development Incentive Program (WDIP), or CARES,—against the current evidence base to ensure that both reflect field best practices and achieve maximum impact. The information in this scan can be used to inform enhancements to F5MC's current Vision 2 initiatives in the short-term. We also present considerations for longer-term planning based on our understanding of trends and efforts by other field leaders, statewide and across the country.

Technical Assistance

F5MC funds technical assistance (TA) efforts to increase access to high quality early learning environments for children in Monterey County. This work is based on the premise that high quality early education is critical to a child's success later in life and that a well trained workforce is critical for quality care. It is well-validated that high quality care and educational settings lead to better developmental outcomes in children's physical, cognitive, social and emotional readiness for school.¹ We examined the current literature² to assess areas in which F5MC's approach and implementation are well-aligned with the field evidence base and areas where alignment might be strengthened.

The way that an adult works with young children is crucial to how fully children are able to reach their potential as learners and future citizens

~Sarah Jackson, New America

Technical Assistance: How does F5MC's approach and implementation align with the evidence base?

According to the National Association for the Education of Young Children (NAEYC), TA is “the provision of targeted and customized supports by a professional(s) with subject matter and adult learning knowledge and skills to develop or strengthen processes, knowledge application, or implementation of services by recipients.”³ TA can be delivered through a variety of strategies, including mentoring, coaching, and consultation. The efficacy of the specific TA approach depends on the programmatic needs,

¹ American Academy of Pediatrics. (2005). Quality Early Child Care from Birth to Kindergarten: A Position Statement. *Pediatrics*, 115, 187-191. Retrieved from: <http://pediatrics.aappublications.org/content/115/1/187.full-text.pdf> 5/19/2016.

² This literature scan was focused on recent literature that was readily accessible and relevant to professional development in early childhood education. It was not intended to be a comprehensive literature review. See Zaslow, et al., 2010 for a comprehensive literature review of professional development approaches.

³ Young, B. (2012). Strategic directions: Technical assistance professionals in state early childhood professional development systems. *National Association for the Education of Young Children Public Policy Report*. p. 9.

organizational culture and preference of participants in the TA process. However, research suggests that effective TA and professional development programs in ECE share six core elements (see Exhibit 1). These six core elements are based on a review of evidence in the field, and are consistent with best practices in adult learning.

Exhibit 1. Core Elements of Effective Professional Development Programs ⁴	
1	Specific articulated objectives
2	Link knowledge and practice
3	Collective participation of educators who work together
4	Intensity and duration matched to content/goals
5	Educators have opportunities to conduct and interpret child assessments
6	Appropriate for the organizational context and practice standards

In a recent review of a wide range of ECE professional development (PD) models, we found that PD approaches for teachers of children ages 0 to 5 could be characterized as either targeting curricular content (such as early literacy) or teaching practices (such as how teachers interact with children).⁵ Among 27 PD models identified in our review, 10 focused on more general teaching practice and 17 on curriculum. Considering these two dichotomies, F5MC-funded TA efforts for ECE providers have placed more emphasis on improving the overall quality of classroom instruction via teaching practice, as opposed to teaching specific curricular content. For example, TA delivered to teachers and site administrators via the F5MC Child Signature Program 2 initiative provided relationship-based work with an assigned on-site TA Provider to support quality improvement. The approach supported child self-regulation and curiosity, physical environments that foster positive interactions and learning, and shifting from teacher-directed to child-initiative work. The TA also enabled teachers to see themselves as professional educators, gain confidence in their skills and understand the critical role they play in supporting child development⁶.

*Effective early learning coaches learn a combination of complex skills, knowledge and habits of mind.
~New Teacher's Center, 2016*

F5MC-funded TA provided to centers is designed to address the unique context of each early childhood program, and support ECE quality and inclusion through on-site guidance. The work is grounded in best

⁴ Adapted from Zaslow, M., Tout, K., Halle, T., Whittaker, J.V., & Lavelle, B. (2010). Toward the identification of features of effective professional development for early childhood educators: Literature review prepared for U.S. Department of Education Office of Planning, Evaluation and Policy Development Policy and Program Studies Service. *Child Trends*. Retrieved from <https://www2.ed.gov/rschstat/eval/professional-development/literature-review.pdf>.

⁵ Harder+Company Community Research (2014a). Professional development inventory: Early learning formal systems strategy. *Memo prepared for the David and Lucile Packard Foundation*.

⁶ Harder+Company Community Research (2015). Cultivating Quality Early Learning Environments: An Evaluation of First 5 Monterey County's Child Signature Project. Retrieved from <https://www.first5monterey.org/reports-and-research.htm?ID=42>.

practice research and collaborative, relationship-based work. TA Providers work with the entire center – including all staff and administrators-- to deepen knowledge in ECE best practices, and bridge that knowledge with practices in the classroom. Evaluations of this work have found positive changes in classroom environment (as assessed by teacher/administrator surveys and focus groups, TA consultant interviews, and ECERS/ITERS scores), and some changes in center infrastructure.⁷

The New Teacher’s Center (NTC) recently published a white paper about coaching and teacher growth. In this document they outline the coaching philosophy, knowledge and skills required to successfully support teachers and administrators to move toward attaining quality standards in early learning and teacher practice.⁸ This included the following principles:

- + Coaches⁹ and teachers must establish a **deep, trusting relationship**
- + Coaching conversations include **inquiry into instructional practice**, such as lesson planning, reflection on data, assessing student needs, and discussion of challenges and brainstorming of possible solutions.
- + **Teachers (not coaches) should set professional goals** that are revisited periodically.
- + **Classroom observations and reflecting conversations** between teachers and coaches following observations are used to analyze data, discover entry points, and determine next steps.
- + **Child-level data is examined to understand the impact of teaching on learning.** In early learning environments, this may include things like language samples or videos of play. This data is used to assess needs, adjust lessons and plan differentiated learning activities.
- + **Coaches themselves participate in ongoing professional development** in order to best support early learning teachers.

Current thinking about approaches to PD, and more specifically TA, are built upon the fundamental assumption that professional development is a life-long process for educators, rather than ending with pre-service teacher training. Teaching is complex and highly situated within its context, which requires educators to be life-long learners. For this reason, **reflective practice** is an approach used in many types of PD (including TA) that challenges practitioners to develop a greater level of self-awareness about the nature and impact of their performance. This awareness, in turn, creates opportunities for professional growth and development.¹⁰ Reflective practice skills can be applied in collaboration with other teachers after formal coaching/TA efforts conclude, thus providing an ongoing set of tools for quality improvement at both the classroom and center level.

⁷ See Harder+Company Community Research evaluation reports for F5MC from 2010, 2011, 2012

⁸ Watkins, A. (2016). Early Learning: Supporting teachers of our youngest children. *New Teacher Center, Practice Brief*.

⁹ Please note that First 5 MC uses the terminology TA Provider rather than coach; “coach” was used as part of the Child Signature Program due to a requirement of this program to use this language.

¹⁰ Osterman, K.F. & Kottkamp, R.B. (1993). *Reflective Practice for Educators: Improving Schooling through Professional Development*. Sage Publications: Newbury Park, CA.

F5MC-funded TA Providers employ reflective practice and support teachers to engage in reflective practice to make “effective, meaningful decisions about how to respond to and plan for children.”¹¹ An example of how reflective teaching can be operationalized for early childhood educators can be found in the exhibit 2.

Exhibit 2. Characteristics of Reflective Teachers

A reflective teacher...

- examines his or her own reactions to children or their actions to understand their source
- is curious about children’s play and watches it closely
- documents details of children’s conversations and activities
- takes time to study notes and photos to puzzle out what is significant
- eagerly shares stories about children’s learning with families and co-workers
- asks co-workers and children’s families for their insights
- reads professional literature to learn more
- shows children photos and stories of themselves to hear their views
- changes the environment and materials to encourage new play and learning possibilities

Overall, the elements included in F5MC-funded TA efforts appear to align well with recommendations from published literature about best practices for this type of support. TA Providers’ use of reflective approaches, delivery of TA over time (rather than one-time events)¹² and use of in-person sessions with phone and/or email follow up have all been found to be effective models of PD. F5MC-funded TA approaches also are inclusive of administrators¹³ and site supervisors as well as teachers, which is considered essential to the long-term success of quality improvement efforts.

Measuring outcomes. Historically, the impact of F5MC-funded TA on teachers and classrooms has been assessed using a combination of observational measures (ECERS/ITERS), teacher self-report, administrator report, and TA Provider report.¹⁴ This approach is consistent with other work in the field¹⁵

¹¹ Carter, M., Cividanes, W., Curtis, D., & Lebo, D. (2011). Becoming a reflective teacher. *Teaching Young Children*, 3, 1-5.

¹² National Association for the Education of Young Children & National Association of Child Care Resource & Referral Agencies. (2011). Early childhood education professional development: Training and technical assistance glossary. Retrieved from http://www.naeyc.org/GlossaryTraining_TA.pdf.

¹³ New Teacher Center. (2016b). High quality mentoring and induction practices. White Paper retrieved from https://newteachercenter.org/wp-content/uploads/high-quality-mentoring_induction-resource.pdf.

¹⁴ See Harder+Company Community Research evaluation reports for F5MC from 2010, 2011, 2012

¹⁵ American Institutes for Research (AIR) & RAND. (2013). Local quality improvement efforts and outcomes descriptive study: Final report.

which has focused primarily on the impact of TA on teachers and classroom environments. Policy makers are increasingly interested in evidence that demonstrates the effectiveness (and ROI) of these types of investments in ECE in terms of outcomes for children. Since F5MC has demonstrated a strong commitment to evaluation of TA for providers, they may wish to consider further assessing the impact of teacher TA on children’s developmental outcomes in the aggregate. F5MC TA providers currently utilize DRDP-PS assessments with teachers as part of the coaching and classroom planning process. If F5MC was interested in expanding evaluation to more directly include child outcomes, there are a number of evaluation designs (for example utilizing comparison classrooms where teachers are not receiving TA or following children over time as the teacher participates in TA) and tools of various rigor and intensity (including the DRDP-PS) that could be employed in this type of work.¹⁶

Field Trends: Opportunities and Considerations for Planning

The TA approaches employed by F5MC-funded programs have achieved promising outcomes and employ evidence-based practices and approaches to increasing access to high quality early care and education for Monterey County families. Opportunities to increase the scale of TA by leveraging F5MC’s experience and expertise could offer a potential pathway to achieving broader impact.

In California, 58 different county governments and more than 100 higher education institutions are responsible for much of the state’s early learning training and professional development.

~Sarah Jackson, New America

Expanding the scale of TA. Other funders working in this arena are beginning to explore ways to scale efforts to improve quality via TA, other forms of professional development, and systems level work. F5MC’s work with Monterey County Office of Education in the implementation of Quality Rating Improvement Systems (QRIS) may represent one important opportunity to achieving quality at scale. F5MC may have the opportunity to influence and

inform approaches taken within QRIS to impact TA provided to a larger pool of early childhood educators based on their experience as a long-time funder of TA in Monterey County. F5MC has deep internal expertise and access to experts who are highly knowledgeable of best practices and in-classroom implementation. F5MC may consider how to leverage this network of expertise as countywide efforts are moved forward to translate quality TA theory into practice. In addition, F5MC may wish to consider leveraging its experience as a catalyst and convener to support cross-agency collaboration that is key to achieve quality at scale.

F5MC ECE Workforce Development Incentive Project - CARES

F5MC also supports ECE workforce development through *Comprehensive Approaches to Raising Educational Standards* (CARES). CARES has had a longstanding role in professional development for ECE students and professionals in Monterey County. Through provision of ECE dedicated counselors and educational incentives, CARES encourages ECE students to complete post-secondary credentials in ECE or related fields. The dedicated ECE Counselors at the community colleges provide specific

¹⁶ Harder+Company Community Research (2014a). Defining and Measuring Quality in Early Learning. *A Memo Prepared for the David and Lucile Packard Foundation.*

information on which classes to take to reach educational goals. Participants take ECE classes with the goal of attaining Associate’s or Bachelor’s degrees in ECE, moving up the Child Development Permit Matrix, or completing ECE specializations. As a professional development program with broad reach, CARES helps promote a sense of professionalism among ECE providers.¹⁷

How does F5MC’s approach and implementation compare to the evidence base?

F5MC efforts to support ECE providers in completing post-secondary education is well positioned to mitigate some student needs and barriers identified in recent work (see Exhibit 3). For example, CARES provides advising and support services designed to help ECE students navigate coursework necessary to earn permits, degrees and/or to transfer from community college to four year universities. Recent work¹⁸ suggests that advising and support is one important and effective strategy to increase permit attainment, degree completion, and transfer requirements. In interviews conducted with ECE Department faculty members across the state, faculty consistently reported that having a dedicated ECE advisor not only increased their program’s ability to support students, but also increased degree completion rates, since many students entered the program with misaligned academic and professional goals.¹⁹

Student Need	Currently addressed via F5MC CARES?
ECE-specific advising and support	Yes
Support from ECE cohort/learning communities	Yes
Funding to pursue education/training	Yes
Embedded basic-skills classes	No
Access to practicum courses during evenings and weekends	No

However, this same work indicates other student needs that present significant barriers to educational attainment that may not be as well-addressed by CARES. For example, many students lack the academic skills needed to complete foundational classes such as English and Math. These students are subsequently placed in remedial English and Math classes, which make the trajectory for completing requirements to earn permits and degrees longer. If students do not pass these courses the first time, they may drop out of the program altogether. Some programs have responded by developing contextualized basic skills courses that situate learning within the ECE context. For example, *Math for Teachers* or *English for Child Care and Early Education* courses make material more accessible and interesting to students by situating it in a context with which they are familiar. These approaches have been found to increase student motivation and raise student confidence, resulting in higher pass rates as compared to traditional courses in English and Math.

¹⁷ See Harder+Company evaluations of F5MC Vision II programs in 2010 and 2011.

¹⁸ Based on review of secondary data and interviews with key stakeholders from higher education institutions in these communities; Packard Foundation & Harder+Company Community Research. (2015). Early childhood education (ECE) higher education program scan: Phase 2.

¹⁹ IBID

²⁰See Harder+Company evaluations of F5MC Vision II programs in 2010 and 2011.

Additionally, ECE students who are already working in the field experience challenges accessing courses, especially practicums—which are typically offered during traditional business hours. Practicums play a critical role in new teacher development, offering opportunities to see theory in practice and to try out techniques with supervision of mentor teachers. Students who cannot participate in practicums cannot complete degree requirements; therefore, they are often left with the choice to forgo degree completion (or sacrifice income) when practicums are offered only within traditional work hours. ECE policy experts suggest that lab school hours could be extended later into the evening and on Saturdays to allow working students’ greater access to these critical courses.²¹

CARES currently includes provision of incentives to encourage students to complete ECE coursework. While the provision of stipends, grants, and scholarships is frequently recommended as a strategy for increasing access to education for the ECE workforce,²² there is very little evidence related to the effectiveness of financial stipends in achieving outcomes. A review of efforts to strengthen the ECE pipeline in Oregon references the provision of scholarships (awarded to community colleges who then re-grant scholarships to individuals) but does not include outcomes data.²³ In California, scholarships and stipends have been shown to increase the number of students taking and completing ECE courses; however, this data is largely descriptive in nature;²⁴ it is unclear whether these differences are statistically significant in nature. According to a 2013 report submitted to the *California Department of Education*, stipends were found to be a “promising” but not “effective” practice in improving ECE workforce quality based on the current evidence.²⁵ The study authors articulated a need for more rigorous research to definitely assess the impact of this strategy. While stipends certainly cannot “hurt,” it is currently unclear if they are less, equally or more effective than other types of incentives or supports.

Measuring outcomes. Evaluation of CARES has focused on reporting the demographic and education pathway characteristics of participants. The evaluation was expanded to include participant self-report of impact on classroom activities, teaching efficacy and sense of professionalism.²⁶ Opportunities to assess change in classroom environment (using the ECERS/ITERS) following training would help strengthen the case for workforce development programs like CARES.²⁷ It would also be compelling to measure the impact that CARES has on progress on the Child Development Permit Matrix and changes in the overall supply of qualified ECE teachers and staff. As discussed earlier in this review, there is little evidence about the impact of cash incentives compared to other types of financial supports (such as tuition or books) although financial support in general has been shown to increase enrollment/credit completion for ECE students.

²¹ Jackson, S. (2015). Not golden yet: Building a stronger workforce for young children in California. Report published by New America. Retrieved from <https://static.newamerica.org/attachments/9761-not-golden-yet/Not%20Golden%20Yet.21606df71ae84408871e43bd1da02a9f.pdf>.

²² IBID

²³ Weber, R.B & Lipscomb, S.T. (2015). Professional development of Oregon’s early learning workforce: A foundation for kindergarten. Policy Brief. Early Learning Division, Oregon State University.

²⁴ American Institutes for Research (AIR) & RAND. (2013). Local quality improvement efforts and outcomes descriptive study: Final report. pp. 173-174.

²⁵ IBID

²⁶ Harder+Company Community Research. (2010). Findings from an evaluation of technical assistance to child care centers and the CARES incentive program. Report prepared for First 5 Monterey County.

²⁷ American Institutes for Research (AIR) & RAND. (2013). Local quality improvement efforts and outcomes descriptive study: Final report.

Field Trends: Opportunities and Considerations for Planning

CARES shows promise as a means to increasing the number of students taking and completing ECE courses, completing permit requirements and degrees and transferring to four year colleges to complete Bachelor's degrees. Here we offer two options for systems-level work for consideration during strategic planning: Scale the Early Childhood Mentor program and support the development of the ECE Workforce Registry. These approaches could potentially impact the ECE workforce at a larger scale than F5MC is currently achieving.

Expand the Early Childhood Mentor program. Our work with Packard Foundation found that ECE/Child Development programs rely heavily on the California Early Childhood Mentor (ECM) program to connect ECE students to practicum experiences at sites that are vetted for quality. Currently, lab schools and ECM do not have enough capacity to meet the needs of all of ECE students and can result in delays in completion or lack of completion of degrees. Increasing access to high quality sites for practicums could positively impact ECE degree completion rates and/or shorten the timeframe in which coursework and degrees are completed. This could also include providing resources to allow sites to expand the hours that lab schools are open to better accommodate the schedules of working professionals who need to complete practicums.

Support the implementation of the California Early Care and Education Workforce Registry in Monterey County. There is currently no single source of data that tracks ECE teacher educational attainment, compensation data, turnover and professional development. Therefore, it is difficult to monitor and assess long-term retention of teachers or impacts of PD efforts on the ECE workforce or ultimately on children. The California Early Care and Education Workforce Registry <https://www.caregistry.org/> is currently being piloted in Los Angeles and San Francisco but is open to participation from other counties. Workforce registries present a compelling opportunity to not only better track progress within the field but also to have data necessary to advocate for funding and policy change at the local, state and national level. F5MC could partner with other local organizations (such as the CCPC, CSUMB, MCOE, and/or local community colleges) to ensure the registry is effectively implemented and the resulting data is used by decision and policy makers in Monterey County. In Los Angeles, First 5 LA is collaborating with other funders to support the implementation of the registry and evaluation of the data from the registry to assess the current state of the ECE workforce, thus there is precedent and experience within the First 5 system for this type of work that can be leveraged to support similar efforts.

[Although] the data and evaluation systems are currently set up, they lack the information decision makers need to understand which parts of the workforce are benefitting from investments in training.

~New America

Takeaways and Opportunities

This crosswalk of recent research literature, policy work, and F5MC programs yielded **takeaways** and identified **opportunities** that may be considered during the strategic planning process for Vision 2.

Technical Assistance:

- + F5MC is designing and supporting TA that aligns with the best practices identified via one of the most comprehensive reviews of ECE PD to date.²⁸ F5MC-funded efforts focus on improving the overall quality of classroom instruction via teaching practice and align with the six characteristics of highly effective PD. These efforts also prioritize and model reflective practice, an approach widely endorsed by the education community.
- + Multiple local evaluations show improvements at the teacher and classroom level, but are unable to document long-term impact, nor impacts on children.
- + Many stakeholders across the state and beyond are grappling with how to scale evidence-based approaches to TA for ECE providers.
- + Efforts in California (e.g., Starting Smart & Strong Initiative²⁹) are underway to test approaches to scale TA by providing access to experts knowledgeable of best practices and in-classroom implementation and promotion of cross-agency collaboration. The Early Learning Lab³⁰ that is part of these efforts to provide support to each of the three communities engaged in this work could potentially provide more detailed information about the way each community is scaling PD.
- + ***Since F5MC has considerable expertise and personal connections to field leaders, they could expand their focus on TA and quality environments by participating in the statewide dialogue about scaling PD.***

ECE Workforce Development

- + Monterey County CARES aligns with other efforts statewide and nationally and addresses core needs of ECE students (such as ECE specific advising and participation in cohort learning communities).
- + There are additional barriers that ECE students experience that delay or impede educational attainment. Specifically, gaps in basic English and Math skills and lack of access to practicum courses on evenings and weekends continue to present major challenges to completion of ECE permit and degree requirements.
- + The jury is still out on the efficacy of cash incentives and the quality of ECE teacher education. While promising evidence suggests cash incentives increase persistence and completion of

²⁸ Zaslow, M., Tout, K., Halle, T., Whittaker, J.V., & Lavelle, B. (2010). Toward the identification of features of effective professional development for early childhood educators: Literature review prepared for U.S. Department of Education Office of Planning, Evaluation and Policy Development Policy and Program Studies Service. Child Trends. Retrieved from <https://www2.ed.gov/rschstat/eval/professional-development/literature-review.pdf>.

²⁹ David and Lucile Packard Foundation's Children, Family and Communities Program

³⁰ It is our understanding that the Early Learning Lab is being directed by Catherine Atkin, formerly of Early Edge.

coursework and degree requirements, it is unclear if there are other financial incentives that may work equally well or better and no data about the long-term impact of stipends.

- + *Opportunities exist for F5MC to strengthen the ECE workforce by helping colleges expand the availability of situated courses in English and Math and by increasing access to high quality practicum sites.***
- + *On a systems level, F5MC could collaborate with other funders to spearhead the county's implementation of the California Early Care and Education Workforce Registry. The ability to more accurately monitor, report and evaluate the impact of ECE education and professional development could have wide-ranging impacts on the county's ECE system.***

Works Reviewed and Cited

The following bibliography includes works reviewed and cited in the preparation of this literature scan. Works that were reviewed and provided important context to the work but were not directly cited in the final version of the scan appear here as well as works that were directly cited (denoted with an asterisk). These citations may also be found within footnotes.

- *American Academy of Pediatrics. (2005). Quality early child care from birth to kindergarten: A position statement. *Pediatrics*, 115, 187-191. Retrieved from: <http://pediatrics.aappublications.org/content/115/1/187.full-text.pdf> 5/19/2016.
- *American Institutes for Research (AIR) & RAND. (2013). Local quality improvement efforts and outcomes descriptive study: Final report.
- Brown, K.C., Squires, J., Connors-Tadros, L., & Horowitz, M. (2014). Preparing principals to support early childhood teachers. Center on Enhancing Early Learning Outcomes (CEELO). Retrieved from http://ceelo.org/wp-content/uploads/2014/07/ceelo_fast_fact_principal_prep.pdf.
- *Carter, M., Cividanes, W., Curtis, D., & Lebo, D. (2011). Becoming a reflective teacher. *Teaching Young Children*, 3, 1-5.
- Chambers, B., Cheung, A.C.K., & Slavin, R.E. (2016). Literacy and language outcomes of comprehensive and constructivist approaches to early childhood education: A systematic review. *Education Research Review*, 18, 88-111.
- Colorado Department of Education. (2010). Colorado's early learning professional development system plan. Retrieved from <https://www.cde.state.co.us/early/copdplan>.
- Department of Health and Human Services, Office of Child Care & Zero to Three. (2010). Professional Development for the infant/toddler early care and education workforce. Paper retrieved from <https://www.zerotothree.org/resources/467-professional-development-for-the-infant-toddler-early-care-and-education-workforce#downloads>.
- *Harder+Company Community Research. (2010). Findings from an evaluation of technical assistance to child care centers and the CARES incentive program. *Report prepared for First 5 Monterey County*.
- *Harder+Company Community Research. (2011). Findings from an evaluation of technical assistance to child care centers, playgroups for informal child care providers, and the CARES incentive program. *Report prepared for First 5 Monterey County*.
- *Harder+Company Community Research. (2012). Year 3 evaluation: Reflection on successes and sustainability of technical assistance to child care centers. *Report prepared for First 5 Monterey County*.
- *Harder+Company Community Research (2014a). Defining and Measuring Quality in Early Learning. *A Memo Prepared for the Packard Foundation*.
- *Harder+Company Community Research. (2014b). Professional development inventory: Early learning formal systems strategy. *Memo prepared for the David and Lucile Packard Foundation*.
- Harder+Company Community Research (2014c). Early childhood professional development ecosystem in California. *Brief prepared for the David and Lucile Packard Foundation*.
- *Harder+Company Community Research (2015). Cultivating Quality Early Learning Environments: An Evaluation of First 5 Monterey County's Child Signature Project. Retrieved from <https://www.first5monterey.org/reports-and-research.htm?ID=42>.

- *Jackson, S. (2015). Not golden yet: Building a stronger workforce for young children in California. *Report published by New America*. Retrieved from <https://static.newamerica.org/attachments/9761-not-golden-yet/Not%20Golden%20Yet.21606df71ae84408871e43bd1da02a9f.pdf>.
- *National Association for the Education of Young Children & National Association of Child Care Resource & Referral Agencies. (2011). Early childhood education professional development: Training and technical assistance glossary. Retrieved from http://www.naeyc.org/GlossaryTraining_TA.pdf
- New Teacher Center. (2016a). Beginning teacher learning communities. White Paper retrieved from https://newteachercenter.org/wp-content/uploads/Beginning-Teacher_Practice-Brief.pdf.
- New Teacher Center. (2016b). High quality mentoring and induction practices. White Paper retrieved from https://newteachercenter.org/wp-content/uploads/high-quality-mentoring_induction-resource.pdf.
- Onks, S.C. (2009). Collaborative reflective practice of two early childhood educators: The impact on their ongoing inquiry and professional development. *Doctoral Dissertation. University of Tennessee*.
- *Osterman, K.F. & Kottkamp, R.B. (1993.) *Reflective Practice for Educators: Improving Schooling through Professional Development*. Sage Publications: Newbury Park, CA.
- Owusu, F. (2015). Educating the educators: Improving higher education for California's early childhood education workforce. *Masters' Thesis submitted to UC Berkeley Goldman School of Public Policy*.
- *Packard Foundation & Harder+Company Community Research (2015). Early childhood education (ECE) higher education program scan: Phase 2.
- Parlakian, R. (2001). *Look, listen, and learn: Reflective supervision and relationship based work*. Washington, D.C.: Zero to Three.
- Simoncini, K.M., Lason, M., & Rocco, S. (2014). Professional dialogue, reflective practice and teacher research: Engaging early childhood pre-service teachers in collegial dialogue about curriculum innovation. *Australian Journal of Teacher Education*, 39, 27-44.
- Southwest Educational Development Laboratory. (2015). Attributes of professional learning communities. Webpost retrieved from <http://www.sedl.org/pubs/change34/4.html>.
- Watkins, A. (2016). Early Learning: Supporting teachers of our youngest children. *New Teacher Center, Practice Brief*. Retrieved from <https://newteachercenter.org/blog/resource/early-learning-supporting-teachers-of-our-youngest-children/>.
- *Weber, R.B & Lipscomb, S.T. (2015). Professional development of Oregon's early learning workforce: A foundation for kindergarten. *Policy Brief. Early Learning Division, Oregon State University*.
- *Young, B. (2012). Strategic directions: Technical assistance professionals in state early childhood professional development systems. *National Association for the Education of Young Children Public Policy Report*.
- *Zaslow, M., Tout, K., Halle, T., Whittaker, J.V., & Lavelle, B. (2010). Toward the identification of features of effective professional development for early childhood educators: Literature review prepared for U.S. Department of Education Office of Planning, Evaluation and Policy Development Policy and Program Studies Service. *Child Trends*. Retrieved from <https://www2.ed.gov/rschstat/eval/professional-development/literature-review.pdf>