

Quality Counts California Quality Training Standards

A Review of the Literature on Components of High-Quality Early Childhood Education Training

Every young child in California deserves to be cared for by adults who have access to high-quality professional learning supports that prepare them to support children's development. The 2015 seminal report, *Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation* (Institute of Medicine [IOM] & National Research Council [NRC], 2015), reviews science on early childhood development and identifies ways educators and caregivers can best support children's development and learning. The report stresses that

... adults who provide for [children's] care and education bear a great responsibility. Care and education professionals are best able to support children from birth through age 8 when they have a shared foundation of knowledge and competencies related to development and early learning across this age span. (National Academies of Sciences, Engineering, and Medicine, n.d., p. 13)

A growing body of research about high-quality teacher professional development indicates that certain components or characteristics of training are important for increasing teacher knowledge and improving teaching practice (Desimone, 2009). This brief provides recommendations for Quality Counts California (QCC) Quality Training Standards that promote professional learning opportunities that include research-aligned content and approaches to adult learning.

Content Based on the Science of Child Development and Early Learning

Training content based on current research and best practice in early childhood education is critical to professionalizing the field and encouraging young children's optimal development (Ochshorn, 2011). To support early childhood education professionals, the California Department of Education's (CDE) Early Learning and Care Division developed the California Early Learning and Development System (CELDS). The CELDS is a comprehensive system that provides early childhood education professionals with an integrated set of guidelines and resources based on state-of-the-art science in early learning and development, and best practices in education.

At the center of the system are the Learning and Development Foundations. The Learning Foundations "outline key knowledge and skills that most children can achieve when provided with the kinds of interactions, instruction, and environments that

research has shown to promote early learning and development” (CDE, 2018b, p. v). Early childhood trainers offering training to support QCC should be knowledgeable of these foundations and align training with these state-adopted, science-based early childhood standards. Training also should draw upon other resources and information based on current child development science.

Alignment with Professional Standards and Guidelines

Training should be aligned with local, state, or national standards for practice in the relevant field (IOM & NRC, 2015; US Department of Education, 2010; Garet, Porter, Desimone, Birman, & Yoon, 2001). Training that aligns with established professional competencies can foster common language and shared goals among early childhood professionals.

The *California Early Childhood Educator (ECE) Competencies* are professional standards developed to inform professional development learning outcomes for California’s early childhood workforce (CDE, 2018a). These research-based competencies describe the knowledge, skills, and dispositions early childhood educators need to provide high-quality care and education to young children and their families. The competencies promote knowledge, skills, and dispositions of early childhood educators along a continuum of four competency contexts related to an educator’s spheres of responsibility. The dispositions focus on attitudes, values, behaviors, and approaches to learning, among other factors.

Early childhood trainers offering training to support QCC should understand California’s early childhood educator competencies and be transparent about the competency areas, performance areas, and competency contexts advanced by their training.

Notably, the QCC Quality Training Standards use as a basis the concepts within the recently published Professionalism Competency Area: Adult Learning Performance Area. The competencies enumerate several key dispositions for professionals who deliver support to adult learners:

- Supports the learning and development of adults with an ethic of care and respect
- Is committed to improving equity and expanding what it means personally and professionally, and regarding it as integral to professional learning and growth
- Sees oneself as a learner while supporting the learning of other adults, listens, works collaboratively, and is responsive to the learning needs of others
- Is open, innovative, and creative (flexible, inventive, resourceful, resilient) when engaging with adults in collaborative learning and reflection

- Appreciates, acknowledges, and is responsive to diverse cultural and linguistic backgrounds, identities, and perspectives when supporting or facilitating the learning of other adults
- Is committed to advocating the best interests (of self, children, families, workforce) for work environments that promote professional learning, reflection, and equity (CDE, 2018a, p. 131)

Effective Training Practices

A wealth of research supports the importance of understanding that adults and children learn differently. Based on Knowles' (1980) foundational theory of andragogy, adult learners' interests, background experiences, learning styles, and professional goals should all be used to develop learning objectives, curricula, and instructional approaches.

Early childhood trainers should understand adult learning theory and integrate approaches to support adults in maximizing their learning (National Association for the Education of Young Children [NAEYC] & National Association of Child Care Resource & Referral Agencies [NACCRRA], 2011). In addition to the first five components more directly related to andragogy, the last three elements here also are important to developing effective training.

1. Includes Clearly Articulated Learning Objectives and Outcomes

Training content that is relevant to participants' professional roles and goals has long been considered a foundation of professional learning. Usually, training is designed to close a performance or knowledge gap, addressing the difference between participants' current skills or knowledge and the required or desired skills or knowledge. Clearly articulated learning objectives and participant learning outcomes make the purpose of a training transparent and are helpful to both the trainer and the trainee.

Learning objectives describe the overarching goals of the training. They should be clear, relevant, and communicated with the audience that will receive the training. Clearly articulated learning objectives help trainers develop focused content and related activities for the training. Competency-based participant learning outcomes are the measurable, realistic expectations for what trainees should know and be able to do after completing the training. Clearly identified and communicated learning objectives and outcomes provide potential participants the opportunity to choose training that best fits their professional goals. Furthermore, when adult learners

choose a training based on information about what they will learn and how, they are intrinsically motivated and more likely to view learning experiences as relevant.

See Bloom (1956); Knowles, Holton, & Swanson (2012); US Department of Education (2010).

2. Acknowledges Participants' Prior Knowledge and Experiences

Adults' past experiences provide a rich resource for their learning; they bring to the learning environment their accumulated wealth of diverse experiences, knowledge, dispositions, and interests, which include influential learning factors such as socio-cultural contexts, familiarity with technology, and motivation for learning, among other factors. Adults process new information by contrasting it with their own experiences and understandings; therefore, recognition of adults' prior knowledge and experiences can deepen group learning and help adults feel valued and competent. In high-quality training, trainers support adult learners in making lasting cognitive connections by building on participants' knowledge and relating new information to past experiences.

See Biech (2014); Desimone (2009); Knowles (1980); Knowles, Holton, & Swanson (2011); Knowles, Holton, & Swanson (2012); National Academies of Sciences, Engineering, and Medicine (2018).

3. Supports Diverse Approaches to Learning

Cognitive theorists acknowledge that adults have different strengths and preferences when it comes to learning new information. Therefore, trainers should present information using a variety of strategies so adult learners can engage in ways that best meet their learning needs. Trainers, too, tend to have a favorite style of teaching and learning, and should be cognizant of their own preferences.

Because adults approach new information and learn differently, high-quality training offers content using a variety of activities that allow participants to access material through diverse modalities (e.g., individual reading, discussion, case studies, group practice). Trainers should also provide multiple options for learners to demonstrate what they know as they progress through the training.

See Cassidy (2004); CAST (2011); Hinton (2009); Riding & Cheema (1984).

4. Includes Opportunities for Active and Collaborative Learning

High-quality training for teachers actively engages participants, meaning it is less like traditional, lecture-based training because it includes methods that engage teachers directly in the practices they are learning. In addition, adults learn best when training includes an interactive, mixed format with opportunities for

collaboration, meaningful discussion, and reflection as well as ample opportunity for adult learners to explore solutions to the common challenges they face in their professional work.

The benefits of training are further reinforced when training promotes collective participation: multiple teachers from the same program or teachers with similar roles in different programs attend training together and actively work together during the learning process. This approach is most effective when time is provided for shared dialogue and planning among colleagues for implementing new practices. Research also shows that directors' and administrators' participation in training with their teachers helps foster an organizational culture of change regarding the training topic area and prepares directors to provide teachers with support in implementing new practices.

See Darling-Hammond, Hyler, & Gardner (2017); Desimone (2009); Douglass, Carter, Smith, & Killins (2015).

5. Emphasizes Applying Knowledge to Practice

Teacher training often fails to effect change in classroom practice. This lack of transfer from knowledge to practice has been found to occur even when participants indicate they have gained knowledge and skills from the training and plan to use that new learning in the classroom. Researchers in the field of implementation science have identified strategies that may be used during and after training to promote the transfer of training content to practice.

To effect change in practice, training should include active demonstration, opportunities for in-training practice and action planning, or a combination thereof. Active demonstration, by the trainer, of content, skills, and strategies allows participants to see how the information may be applied. In-training practice provides participants the opportunity to apply learned content to real-world situations. Finally, goal setting and action planning activities during the training increase the likelihood that participants will transfer new learning into their own settings.

Including post-training implementation support activities in the training design is also indicated by implementation science as an effective way to help participants transfer training content to practice. Research indicates that training becomes more effective when accompanied by job-embedded coaching or ongoing study. Other examples of implementation support include follow-up technical assistance, such as mentoring, consultation, professional development advising, or peer coaching, or other post-training activities that promote continued skill development in the workplace. Implementation support may vary in levels of intensity and duration depending on resources and the needs of participants and may be provided face to face or through distance, technology-based, or hybrid methods.

See Desimone (2009); Garet et al. (2001); Joyce & Showers (1983, 1995, 2002) as cited in Killion (2011); McDonald (2009); Metz, Halle, Bartley, & Blasberg (2013); NAEYC and NACCRRA (2011).

6. Evaluates Impact

A key component of high-quality training is evaluation of impact. Training evaluation should gauge the impact of the training based on the training's specific goals and objectives and based on any increase in participants' knowledge or skills. Information from the evaluation processes can inform improvements to the design and delivery of a training in the future. To gather comprehensive information, both formative and summative evaluation strategies should be used. Formative evaluation, which involves checking for understanding and learning *during* the training, allows the trainer to adjust the content, pace, and activities accordingly to ensure participants' knowledge and skills are developing as planned. Summative evaluation focuses on the training objectives and learner outcomes *after* the completion of the training. Summative evaluation strategies range from those that occur immediately upon the conclusion of the training and others that are conducted years into the future.

Training evaluation is most often described as a four-level model:

- **Reaction.** Measures the participants' perceptions of the training (e.g., surveys about how participants felt about the training and what they learned).
- **Learning.** Closely tied to the learning objectives. Measures participant learning (e.g., knowledge pre- and post-test).
- **Behavior.** Measures changes in participants' job-related behaviors or performance, or the extent to which training theory is transferred to practice. They can include anything from self-report to observed changes reported by a peer, coach, or director.
- **Results.** Measures the broader impact of the training, such as the effect of teacher training on child or family outcomes. Often this type of evaluation is conducted through formal research studies.

See Darling-Hammond et al. (2017); Desimone & Garet (2015); IOM & NRC (2015); Killion (2017); NAEYC & NACCRRA (2011); Rajeev, Madan, & Jayarajan (2009); US Department of Education (2010); Van Buren & Erskine (2002) as cited in Arthur, Bennett, Edens, & Bell (2003).

7. Considers Duration and Intensity

Professional development is more effective when the trainer matches the intensity and duration of the training to the training goals and objectives, as well as to the participants' knowledge and experience. A training or series of trainings may focus on information dissemination; comprehension, analysis, or synthesis of content; application of knowledge or skills and related attitudes and dispositions; or a combination thereof. A brief, one-time training without follow-up may be effective for conveying information or covering one strategy or activity. Studies indicate, however, that professional development of sustained duration is more effective at increasing subject-matter knowledge and promoting meaningful teacher change. This sustained duration includes both the span of time over which the professional development occurs and the number of contact hours spent in the learning activities during and following training.

See Darling-Hammond et al. (2017); Desimone (2009); Knapp (2003); NAEYC & NACCRRA (2011); Raikes et al. (2006); Sailors & Price (2010) as cited in Desimone & Garet (2015); US Department of Education (2010).

8. Addresses Access

Training designed to incorporate all the previously listed components will not be effective if it does not reach its intended audiences. Access generally refers to the ability of all interested participants to engage in training. Improving access includes attending to where, when, and how the training is provided, ensuring participation requirements do not unintentionally discriminate, and ensuring that invitations to training reach the intended audience in a timely manner.

See Gable & Halliburton (2003).

References

- Arthur, W., Jr., Bennett, W., Jr., Edens, P. S., & Bell, S. T. (2003). Effectiveness of training in organizations: A meta-analysis of design and evaluation features. *Journal of Applied Psychology*, 88(2), 234–245.
- Biech, E. (Ed.). (2014). *ASTD handbook: The definitive reference for training & development*. Alexandria, VA: ASTD Press.
- Bloom, B. S. (1956). *Taxonomy of educational objectives: The classification of educational goals*. New York, NY: Longmans, Green.

- California Department of Education. (2018a). *California early childhood educator (ECE) competencies* (2nd ed.). Unpublished manuscript.
- California Department of Education. (2018b). *California preschool learning foundations* (Vol. 1). Sacramento, CA: Author. Retrieved from <https://www.cde.ca.gov/sp/cd/re/psfoundations.asp>
- Cassidy, S. (2004). Learning styles: An overview of theories, models, and measures. *Educational Psychology*, 24(4), 419–444.
- CAST. (2011). Universal design for learning guidelines. Retrieved from <http://udlguidelines.cast.org/>
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Palo Alto, CA: Learning Policy Institute.
- Desimone, L. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher*, 38(3), 181–199.
- Desimone, L. M., & Garet, M. S. (2015). Best practices in teachers' professional development in the United States. *Psychology, Society and Education*, 7(3), 252–263.
- Douglass, A., Carter, A., Smith, F., & Killins, S. (2015). Training together: State policy and collective participation in early educator professional development. *New England Journal of Public Policy*, 27(1), article 5. Retrieved from <http://scholarworks.umb.edu/nejpp/vol27/iss1/5>
- Gable, S., & Halliburton, A. (2003). Barriers to child care providers' professional development. *Child and Youth Care Forum*, 32, 175–193.
- Garet, M. S., Porter, A. C., Desimone, L. M., Birman, B., & Yoon, K. S. (2001). What makes professional development effective? Analysis of a national sample of teachers. *American Educational Research Journal*, 38(3), 915–945.
- Hinton, J. (2009). Lifelong learning: Effective adult learning strategies and implementation for working professionals. *The International Journal of Learning*, 16(1).
- Institute of Medicine & National Research Council. (2015). *Transforming the workforce for children birth through age 8: A unifying foundation*. Washington, DC: The National Academies Press.

- Killion, J. (2011). The changing face of professional development. *Edge: The Latest Information for the Education Practitioner*, 6(5).
- Killion, J. (2017). Why evaluations fail. *The Learning Professional*, 38(2).
- Knapp, M. S. (2003). Professional development as a policy pathway. *Review of Research in Education*, 27(1), 109–157.
- Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy*. Wilton, CT: Association Press.
- Knowles, M. S., Holton, E. F., III, & Swanson, R. A. (2011). *The adult learner*. Burlington, MA: Routledge, 2011.
- Knowles, M. S., Holton, E. F., III, & Swanson, R. A. (2012). *The adult learner: The definitive classic in adult education and human resource development* (7th ed.). New York, NY: Routledge.
- McDonald, L. (2009). Teacher change: A dynamic interactive approach. *International Journal of Learning*, 6(10), 623–636.
- Metz, A., Halle, T., Bartley, L., & Blasberg, A. (2013). The key components of successful implementation. In T. Halle, A. Metz, & I. Martinez-Beck (Eds.), *Applying implementation science in early childhood programs and systems* (pp. 21–42). Baltimore, MD: Paul H. Brookes Publishing.
- National Academies of Sciences, Engineering, and Medicine. (n.d.). *Child development and early learning: A foundation for professional knowledge and competencies*. Washington, DC: The National Academies Press. Retrieved from <https://www.nap.edu/resource/19401/ProfKnowCompFINAL.pdf>
- National Academies of Sciences, Engineering, and Medicine (2018). *How people learn II: Learners, contexts, and cultures*. Washington, DC: The National Academies Press.
- 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* [Scholarly project]. Retrieved from https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/our-work/public-policy-advocacy/glossarytraining_ta.pdf
- Ochshorn, S. (2011). *Forging a new framework for professional development: A report on "The Science of Professional Development in Early Childhood Education: A National Summit."* Washington, DC: Zero to Three.

- Raikes, H. H., Torquati, J. C., Hegland, S., Raikes, H. A., Scott, J., Messner, L., Peterson, C., Thornburg, K., Houf, B., & Scott, S. (2006). Studying the culture of quality early education and care: A cumulative approach to measuring characteristics of the workforce and relations to quality in four midwestern states. In M. Zaslow & I. Martinez–Beck (Eds.), *Critical issues in early childhood professional development* (pp. 111–136). Baltimore, MD: Brookes.
- Rajeev, P., Madan, M. S., & Jayarajan, K. (2009). Revisiting Kirkpatrick’s model: An evaluation of an academic training. *Current Science*, 96(2).
- Riding, R. J., & Cheema, I. (1991). Cognitive styles: An overview and integration. *Educational Psychology*, 11, 193–215.
- US Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service. (2010). *Toward the identification of features of effective professional development for early childhood educators*. Washington, DC: Author.