

Child Care & Early Education RESEARCH CONNECTIONS

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Infant and Toddler Child Care Quality Measures Bibliography

The *Research Connections* collection contains records for more than 1,300 instruments that have been used to conduct studies in the child care and early education field. This bibliography provides records for instruments in the collection that can be used to observe child care quality in center-based settings serving infants and toddlers.

In addition to citations and descriptions for the various versions of instruments, this bibliography contains links to all of the studies in the *Research Connections* collection that have used that instrument. Note: for instruments that can also be used outside of infant and toddler settings, these related studies can include those conducted in settings serving preschool- and/or school-age children.

Additional information on the purposes, key constructs, administration, reliability, and validity for many of these instruments can be found in *Quality in Early Childhood Care and Education Settings: A Compendium of Measures*, which was published in 2010 by the Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

A future bibliography will provide records for instruments in the collection used to observe quality in home-based settings, where many infants and toddlers receive care.

Please email us at contact@researchconnections.org with additional instruments or studies that are not included in this bibliography.



Assessment Profile for Early Childhood Programs (APECP)

Abbott-Shim, M., & Sibley, A. (1987). *Assessment Profile for Early Childhood Programs*. Atlanta, GA: Quality Assist.

There are 33 resources related to this instrument.

Description: “The Assessment Profile for Early Childhood Programs: Pre-school, Toddler, Infant, School-Age, and Administration instruments are formative evaluation measures used for program improvement purposes. These measures are more comprehensive than the summative, research tool and provide user-friendly procedures for self-evaluation of early childhood settings. As formative measures, they are supported by software that provides extensive analyses and detailed program improvement recommendations. The Assessment Profile for Early Childhood Programs tool evaluates center-based, classroom and administrative practices” (Halle, Vick, & Anderson, 2010, p. 44)

Caregiver Environment Scale (CES)

Capone, A., Oren, T. A., & Neisworth, J. (1995). *Caregiver-Environment Scale*. Unpublished instrument, Pennsylvania State University.

There is 1 resource related to this instrument.

Description: “The CES examines both the characteristics of infant care personnel and the facility in which this center-based care occurs.... To identify specific content for inclusion in CES, several steps were taken. First, based on the theory that current infant scales would reflect what is accepted as normal, infant development scales were reviewed. Next, an extensive review of professional literature in the areas of parent—infant interactions, infant development, and play training was conducted to further identify process and environmental variables shown to be correlated with optimal infant development. Last, existing instruments that assess variables associated with early childhood care were reviewed.... CES differs from these instruments in that the focus of CES is on specific caregiver interactive behaviors with infants from 6 weeks to 1-year-old, as well as identifying environmental characteristics and materials of infant care centers.” (Oren & Ruhl, 2000, pp. 133-134)

Caregiver Interaction Scale (CIS)

Arnett, J. (1985). *Caregiver Interaction Scale*. Princeton, NJ: Educational Testing Service.
There are 220 resources related to this instrument.

Description: “The purpose of this measure is “to rate the emotional tone, discipline style, and responsiveness of teachers and caregivers in a classroom. The items focus on the emotional tone and responsiveness of the caregiver’s interactions with children. The scale does not address issues of curriculum or other classroom management issues (such as grouping or flow of activities)” (U.S. Department of Education, 1997, p. 78).” (Halle et al., 2010, p. 99)

Caregiver Observation Form and Scale (COFAS)

Fiene, R. (1984). *Caregiver Observation Form and Scale*. Washington, DC: Children's Services Monitoring Transfer Consortium.
There are 3 resources related to this instrument.

Description: “The Caregiver Observation Form and Scale (COFAS) is used to record behaviors of caregivers while interacting with children in a classroom setting.... The COFAS was developed to complement the Child Development Program Evaluation Scale (CDPES) in order to assess interactions between teachers and children in child care settings. The items included in the COFAS were included after an extensive review of the research literature on the distinguishing characteristics of high quality programs and their teachers.” (Halle et al., 2010, p. 129)

Child Caregiver Interaction Scale

Carl, B. (2007). *Child Caregiver Interaction Scale*. In *Child Caregiver Interaction Scale*. Unpublished doctoral dissertation, Indiana University of Pennsylvania, Indiana, PA.
There are 6 resources related to this instrument.

Carl, B. (2010). *Child Caregiver Interaction Scale (Rev. ed.)*. Indiana, PA: Indiana University of Pennsylvania.
There are two resources related to this instrument.

Description: “A review of established child care interaction measures revealed that no one assessment device exists for measuring the interaction between a child care provider and

children in multiple age groupings and settings, ranging from infancy through school age and including family child care homes. Most caregiver interaction scales remain limited to specific age groupings and therefore do not cover the age spectrum found in most child care facilities. The CCIS is a valuable and much needed measurement tool to assess child caregiver interaction across age groupings and settings. This measure not only provides a scale that can be used for research purposes to compare child care quality, but also serves as a noteworthy tool for training and technical assistance. By helping child caregivers understand their strengths and areas most in need for improvement, the CCIS is a tool that can be used to improve quality child care.” (Halle et al., 2010, p. 77)

Child-Caregiver Observation System (C-COS)

Boller, K., & Sprachman, S. (1998). *Child-Caregiver Observation System*. Princeton, NJ: Mathematica Policy Research, Inc.

There are seven resources related to this instrument.

Description: ““C-COS is a child-focused observation system that captures the experiences of an individual child in a caregiving environment over a two-hour period using a time-sampling procedure” (Boller & Sprachman, 1998, p. 1). It was developed to allow for comparisons of the quality of care provided across setting type (centers, family child care homes). The language categories were adapted from the items in the Observation Record of the Caregiving Environment (ORCE; NICHD ECCRN, 1996) that were found to be most associated with children’s language development.” (Halle et al., 2010, p. 82)

Child Development Program Evaluation Scale (CDPES)

Fiene, R. (1984). *Child Development Program Evaluation Scale*. Washington, DC: Children's Services Monitoring Transfer Consortium.

There are four resources related to this instrument.

Description: ““The purpose in constructing the CDPE Scale was the perceived need in the child development program area to have a comprehensive scale that could be used by states or local agencies to determine compliance of child development programs with basic minimal requirements that ensure a child is in a safe and healthy environment” (Fiene, 1984, Introduction). The scale also measures the quality of the child development program.” (Halle et al., 2010, p. 88)

Classroom Assessment Scoring System (CLASS)

Jamison, K., Cabell, S. Q., LoCasale-Crouch, J., Hamre, B., & Pianta, R. C. (2014). Classroom Assessment Scoring System: Infant Version. *Early Education and Development*, 25(4), 553-572. *There is 1 resource related to this instrument.*

Description: “Given the limitations of the current state of observations systems in infant classroom settings and the need for an updated, systematic assessment of the quality of interactions between caregivers and infants, the decision was made to pursue development of the CLASS–Infant version. The CLASS–Infant is based on developmentally appropriate practice (Copple & Bredekamp, 2009), previous observation work on interactions supporting children’s development (Hamre & Pianta, 2007; NICHD ECCRN, 1996), and the CLASS–Pre-K and CLASS–Toddler measures (LaParo et al., 2012; Pianta et al., 2008). Similar to the other versions of the CLASS, the CLASS–Infant builds off of the ORCE measure (i.e., NICHD ECCRN, 2003; Pianta, La Paro, Payne, Cox, & Bradley, 2002). To remain consistent with previous versions of the CLASS, we use the term teacher to refer to any caregiver in a nonparental infant child care setting. An underlying assumption of the CLASS framework is that there is heterotypic continuity in effective teacher–child interactions across age levels. This means that the dimensions used in the CLASS framework to define and assess effective teacher–child interactions are similar across the infant, toddler, and preschool periods. However, the ways in which these dimensions are manifested are specific to particular developmental levels or age groups (i.e., infant vs. toddler, toddler vs. preschool). In other words, the ways in which these dimensions are demonstrated in practice may shift as children grow, develop, and mature.” (Jamison, Cabell, LoCasale-Crouch, Hamre, & Pianta, 2014, p. 556)

Pianta, R. C., La Paro, K. M., & Hamre, B. (2009). *Classroom Assessment Scoring System: Toddler Version*. Unpublished instrument. *There are 20 resources related to this instrument.*

Description: “The Classroom Assessment Scoring System: Toddler Version (CLASS Toddler) is an observational instrument developed to assess classroom quality in toddler child care classrooms. Similar in format to the CLASS Pre-K and CLASS Elementary (Pianta, La Paro, & Hamre, 2008), the Toddler version captures the average experience of a child in a given classroom, paying particular attention to the teachers’ interactions and behaviors with the children. Other measures of classroom quality focus primarily on the physical aspects of the environment or on characteristics of teacher sensitivity and emotional support; however, they do not address important aspects teacher-child interactions or “the ‘how’ in teaching behaviors,” such as behavior guidance and the facilitation of language (Thomason & La Paro, 2009, p. 288). The CLASS Toddler was designed to capture these aspects of process quality

specifically in toddler classrooms.” (Halle et al., 2010, p. 109)

Emerging Academic Snapshot (EAS)

Ritchie, S., Howes, C., Kraft-Sayre, M. E., & Weiser, B. (2001). *Emerging Academic Snapshot*. Unpublished instrument, University of California, Los Angeles.

There are 29 resources related to this instrument.

Howes, C. (1980). Peer Play Scale. *Developmental Psychology*, 16(4), 371-372.

There are 11 resources related to this instrument.

Howes, C., & Matheson, C. C. (1992). Revised Peer Play Scale. *Developmental Psychology*, 28(5), 961-974.

There are 11 resources related to this instrument.

Howes, C., & Stewart, P. (1987). Adult Involvement Scale. *Developmental Psychology*, 23(3), 423-430.

There are 36 resources related to this instrument.

Description: “The EAS is a time sampling observation instrument designed to describe children’s exposure to instruction and engagement in academic activities as well as to describe activities and adult responsive involvement. The unique contributions of EAS as compared to previous observational instruments are in the teacher engagement of the children and children’s engagement with academic activities sections.... The 27 items on the EAS are divided into sections including:... Adult involvement with the child (Adult Involvement Scale) (Howes, Phillips, & Whitebook, 1992; Howes & Stewart, 1987)... Peer Play Scale (Howes & Matheson, 1992)” (Halle et al., 2010, pp. 136-137)

Infant/Toddler Environment Rating Scale (ITERS)

Harms, T., Cryer, D., & Clifford, R. M. (1990). *Infant/Toddler Environment Rating Scale*. New York: Teachers College Press.

There are 114 resources related to this instrument.

Harms, T. (2002). *Infant/Toddler Environment Rating Scale (Rev. ed.)*. New York: Teachers College Press.

There are 107 resources related to this instrument.

Description: “The ITERS-R measures global quality in center-based programs serving children from birth to 30 months of age. “The ITERS-R contains items to assess provision in the environment for the protection of children’s health and safety, appropriate stimulation through language and activities, and warm, supportive interaction” (Harms, Cryer & Clifford, 2003; p. 1). The ITERS-R is a revision of the ITERS originally published in 1990. “The ITERS-R retains the original broad definition of environment including organization of space, interaction, activities, schedule, and provisions for parents and staff” (Harms, Cryer & Clifford, 2003; p. 1).” (Halle et al., 2010, p. 205)

Observational Record of the Caregiving Environment (ORCE)

NICHD Early Child Care Research Network. (1996). Observational Record of the Caregiving Environment. *Early Childhood Research Quarterly*, 11(3), 269-306.

There are 125 resources related to this instrument.

Description: “The Observational Record of the Caregiving Environment (ORCE) was created for the NICHD Study of Early Child Care (now known as the NICHD Study of Early Child Care and Youth Development) because no other observational rating scale had been developed which could address children’s behavior over the entire age span of the study (6 months to 54 months) and across different non-maternal child care settings.” (Halle et al., 2010, p. 227)

Kryzer, E. M., Kovan, N., Phillips, D. A., Domagall, L. A., & Gunnar, M. R. (2007). Modified Observational Record of the Caregiving Environment. *Early Childhood Research Quarterly*, 22(4), 451-466.

There are 8 resources related to this instrument.

Description: “Children were observed using a modified version of the “Observational Ratings of the Caregiving Environment” (ORCE, version for 24/36 months and 54 months), a standardized instrument developed for rating both home-based and center-based child care in the NICHD sponsored study of early child care (NICHD ECCRN, 1996). Items were selected from these two instruments to reflect caregiver and child behaviors that were appropriate for scoring across a wide age range. For example, the 24- and 36-month ORCE differentiates between caregiver sensitivity to distress and sensitivity to non-distress, while the 54-month ORCE does not. To be more inclusive across a wide age range, the M-ORCE uses the more general 54-month ORCE sensitivity ratings. In contrast, the 24-/36-month ORCE has codes for the care provider speaking

positively and negatively to the child, while this code is not available on the 54-month ORCE. The M-ORCE contains the more general positive versus negative talk items. In addition, several new codes and ratings were developed to reflect the quality of the child's functioning at child care." (Kryzer, Kovan, Phillips, Domagall, & Gunnar, 2007, p. 454)

Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO)

Roggman, L. A., Cook, G. A., Innocenti, M. S., Jump, V. K., Christiansen, K., & Anderson, S. (2013). *Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO)*. Baltimore: Paul H. Brookes Publishing.

There are 6 resources related to this instrument.

Description: "Childcare quality has been investigated widely over the past 30 years, as increasingly more evidence has emerged that shows that children's developmental outcomes are influenced by the quality of care that they receive in group-care settings. The current emphasis on quality-improvement ratings in childcare provides a unique measurement challenge to ensure accountability for the care of our young children, with a noticeable lack of attention to caregiver interactions with children. The purpose of the current study is to investigate an easy-to-use measure that might address this oversight. The Parenting Interactions with Children: Checklist of Observations Linked to Outcomes (PICCOLO) tool has been shown to be reliable and valid for use with parents and was used in the current study to determine whether the PICCOLO, when used to observe caregiver-child interactions in group-care settings, is correlated with other common measures of childcare quality, including the family of Environment Rating Scales (Early Childhood Environment Rating Scale-Revised (T. Harms, R.M. Clifford, & D. Cryer, 2005), the Family Child Care Rating Scale-Revised (T. Harms, D. Cryer, & R.M. Clifford, 2007), or the Infant/Toddler Environment Rating Scale-Revised (T. Harms, D. Cryer, & R.M. Clifford, 2006).and the Arnett Caregiver Interaction Scales (J. Arnett, 1989).... Results indicate that the PICCOLO is a valid tool to measure caregiver interaction with children in a childcare situation." (Jump & Christiansen, 2013, p. 319)

Program for Infant/Toddler Care Program Assessment Rating Scale (PITC PARS)

Mangione, P. L. (n.d.). *Program for Infant/Toddler Care Program Assessment Rating Scale*. San Francisco: Center for Child and Family Studies (WestEd).

There are 4 resources related to this instrument.

Description: “The Program for Infant/Toddler Care Program Assessment Rating Scale (PITC PARS) is an observational instrument designed to assess the quality of early care and education settings for infants and toddlers. The PITC PARS measures the extent to which caregiving practices, the care environment, program policies and administrative structures promote responsive, relationship-based care for infants and toddlers. The PITC PARS utilizes a positive orientation to assessing various aspects of program quality.” (Halle et al., 2010, pp. 246-247)

Program Quality Profile (PQP)

Cook-Kilroy, J., Bagnato, S. J., Smith-Jones, J., & Matesa, M. (1998). *Program Quality Profile for Early Childhood Settings*. Unpublished instrument.

There is 1 resource related to this instrument.

Description: “Program quality data for each early care and education setting in ECI that enrolled the children was collected using the SPECS-designed Program Quality Profile for Early Childhood Settings (PQP) (PQP; Cook-Kilroy, Bagnato, Smith-Jones & Matesa, 1998). The PQP was developed to operationalize the “best practice” standards of the revised developmentally-appropriate practices (Bredekamp & Copple, 1997). Concurrent validity studies with the ECERS and its family of instruments reveal correlation coefficients of .63 to .91 with an aggregate association of .83 over two evaluation time points. The PQP is an authentic observational scale that surveys developmentally appropriate practice (DAP) standards across infant to kindergarten transition settings” (Bagnato, Smith-Jones, McClomb, & Cook-Kilroy, 2002, p.10)

Quality of Caregiver-Child Interactions for Infants and Toddlers (Q-CCIIT)

United States. Administration for Children and Families. Office of Planning, Research and Evaluation. (2012). *Quality of Caregiver-Child Interactions for Infants and Toddlers (Q-CCIIT): Caregiver Questionnaire*. In U.S. Administration for Children and Families, Office of Planning, Research and Evaluation (2015). *Measuring the Quality of Caregiver-Child Interactions for Infants and Toddlers (Q-CCIIT): Appendices (OPRE Report 2015-13)*. Washington, DC: Author.

There are 2 resources related to this instrument.

Description: “The Quality of Caregiver–Child Interactions for Infants and Toddlers (Q-CCIIT) observation tool was developed to measure the quality of child care settings—specifically, the quality of caregiver-child interaction for infants and toddlers in nonparental care. This tool is

appropriate for use across child care settings, including center-based care and family child care homes (FCCs), as well as single- and mixed-age classrooms. This tool offers early childhood professionals and researchers the means to obtain a better understanding of how caregivers and young children interact in child care settings and improve child care services in the future.” (Atkins-Burnett et al., 2015, p. xiii)

Quality of Early Childhood Care Settings (QUEST), and instruments from the National Study of Child Care for Low-Income Families

Goodson, B. D., Layzer, J. I., & Layzer, C. J. (2005). *Quality of Early Childhood Care Settings: Caregiver Rating Scale*. Cambridge, MA: Abt Associates.

There are 12 resources related to this instrument.

Goodson, B. D., Layzer, J. I., & Creps, C. L. (n.d.). *Environment Checklist*. Cambridge, MA: Abt Associates.

There are 6 resources related to this instrument.

United States. Administration for Children and Families. (2006). *Provider Rating System*. Washington, DC: U.S. Administration for Children and Families.

There are 4 resources related to this instrument.

Description: ““The Caregiver Rating Scale is based on the most up-to-date research on practices that are associated with children’s development and learning. The rating scale focuses on caregiver warmth/responsiveness and on caregiver support for the child’s development in four important areas—cognitive development, especially language development and early literacy; emotional development; social development; and physical development” (Goodson, Layzer, & Layzer, 2005, p. 5-1).... The current version of the QUEST consists of two measures: the Environment Checklist and the Provider Rating. The Environment Checklist assesses health and safety issues as well as the adequacy and appropriateness of resources in the care environment. The Provider Rating assesses caregiver interactions and behaviors.” (Halle et al., 2010, p. 272)

United States. Administration for Children and Families. (2006). *Child Observation*. Washington, DC: U.S. Administration for Children and Families.

There are 2 resources related to this instrument.

Description: “The Child Observation describes the interactions and language of the focus child

in the setting. The measure is a time-sample observation in which the child's behavior is observed for 5 seconds and then recorded in the next 15 seconds. The focus child is observed for a total of 30 minutes during the half-day family day care visit. The observations are conducted when the child is not eating, napping, resting, or sleeping. In the observation, the focus child's behavior is described in terms of 7 dimensions: (1) focus child with objects—whether and how the child is playing with objects, (2) focus child with peers—whether and how the child is interacting with peers, (3) focus child's language—whether or not the child uses language and with whom, (4) focus child's prosocial behavior—any prosocial or antisocial behavior displayed by the child and to whom, (5) peer responses to the focus child—any prosocial or antisocial behavior displayed by other children to focus child, (6) adult contact with focus child—the level of interaction between any adult and focus child, and (7) adult language with focus child—the content of any language directed one-on-one by an adult to the focus child.” (Layzer, Goodson, & Brown-Lyons, 2007, pp. 2-5)

Goodson, B. D., Layzer, J. I., & Creps, C. L. (n.d.). *Environment Snapshot*. Cambridge, MA: Abt Associates.

There are 5 resources related to this instrument.

Description: “The Environment Snapshot provides a picture of the care setting at a point in time including: the adults and children in the setting; their activities and interactions (with the focus child indicated individually); and overall levels of engagement or distress in the setting. The Environment Snapshot is a synthesis of other child care snapshot measures that have been used by Abt and other researchers in previous studies. All of the prior Snapshots were developed with child care centers in mind (although the National Day Care Infant Study also looked at infants in family day care homes and in their own homes); therefore, we adapted the earlier measures to be equally applicable to center and home care.” (Layzer et al., 2007, pp. 2-4)

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References

- Atkins-Burnett, S., Monahan, S., Tarullo, L. B., Xue, Y., Cavadel, E., Malone, L. M., & Akers, L. (2015). *Measuring the Quality of Caregiver-Child Interactions for Infants and Toddlers (Q-CCIT): Final report*. (OPRE Report 2015-13). Washington, DC: U.S. Administration for Children and Families, Office of Planning, Research and Evaluation.
- Bagnato, S. J., Smith-Jones, J., McClomb, G., & Cook-Kilroy, J. (2002). *Quality early learning: Key to school success: A first-phase 3-year program evaluation research report for Pittsburgh's Early Childhood Initiative (ECI)*. Pittsburgh, PA: University of Pittsburgh, University, Community, Leaders, and Individuals with Disabilities Center.
- Halle, T., Vick, J., & Anderson, R. (2010). *Quality in early childhood care and education settings: A compendium of measures. (2nd ed.)*. Washington, DC: U.S. Administration for Children and Families, Office of Planning, Research and Evaluation.
- Jamison, K., Cabell, S. Q., LoCasale-Crouch, J., Hamre, B., & Pianta, R. C. (2014). Classroom Assessment Scoring System: Infant Version. *Early Education and Development*, 25(4), 553-572.
- Jump, V. K., & Christiansen, K. (2013). Validity of the PICCOLO tool in child care settings: Can it assess caregiver interaction behaviors?. *Infant Mental Health Journal*, 34(4), 319-329.
- Kryzer, E. M., Kovan, N., Phillips, D. A., Domagall, L. A., & Gunnar, M. R. (2007). Toddlers' and preschoolers' experience in family day care: Age differences and behavioral correlates. *Early Childhood Research Quarterly*, 22(4), 451-466.
- Layzer, J. I., Goodson, B. D., & Brown-Lyons, M. (2007). *National Study of Child Care for Low-Income Families: Care in the home: A description of family child care and the experiences of the families and children that use it: Final report*. Washington, DC: U.S. Administration for Children and Families.
- Oren, T. A., & Ruhl, K. L. (2000). Caregiver-Environment Scale: Assessing the quality of center-based infant care. *Early Childhood Education Journal*, 28(2), 133-138.