



EARLY CHILDHOOD EDUCATION INSTITUTE
The UNIVERSITY of OKLAHOMA - TULSA

Q-CCIIT

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What is Q-CCIIT?

- The Quality of Caregiver–Child Interactions for Infants and Toddlers (Q-CCIIT)
- Evidence-based observational measure of the quality of caregiver interactions with infants and toddlers (0 – 36 months)
- Designed for center-based classrooms and family child care homes
- Developed with funding from Office of Planning, Research and Evaluation (OPRE) and Office of Head Start (OHS) in the Administration for Children and Families (ACF)

Poll: Tell us about yourself

Please mark the roles that describe your work:

- Early childhood administrators
- Coaches or mentors
- Training and technical assistance providers
- Teachers/Caregivers
- Evaluators
- Researchers
- Higher education instructors
- Other



Who could use Q-CCIIT?

Many early childhood professionals.

For example:

- Early childhood administrators
- Coaches or mentors
- Training and technical assistance providers
- Teachers/Caregivers
- Evaluators
- Researchers
- Higher education instructors

What does Q-CCIIT measure?



- Support for:
 - Social and emotional development
 - Language and literacy
 - Cognitive development
- Areas of concern



What is Q-CCIIT used for?

- Professional development
- Research
- Administrator decision-making



Poll: Using Q-CCIIT



What purposes would you like to use Q-CCIIT for?

- Professional development
- Research
- Monitoring/decision making
- Other



Psychometric field test observations

	Total	FCC	Infant Classrooms	Toddler Classrooms
Q-CCIIT observations	400	110	136	154
Test-retest	62	30	18	14
Reliability pair	52	11	17	24
ORCE	119	41	36	42
ITERS-R	65	NA	30	35
FCCERS-R	49	49	NA	NA

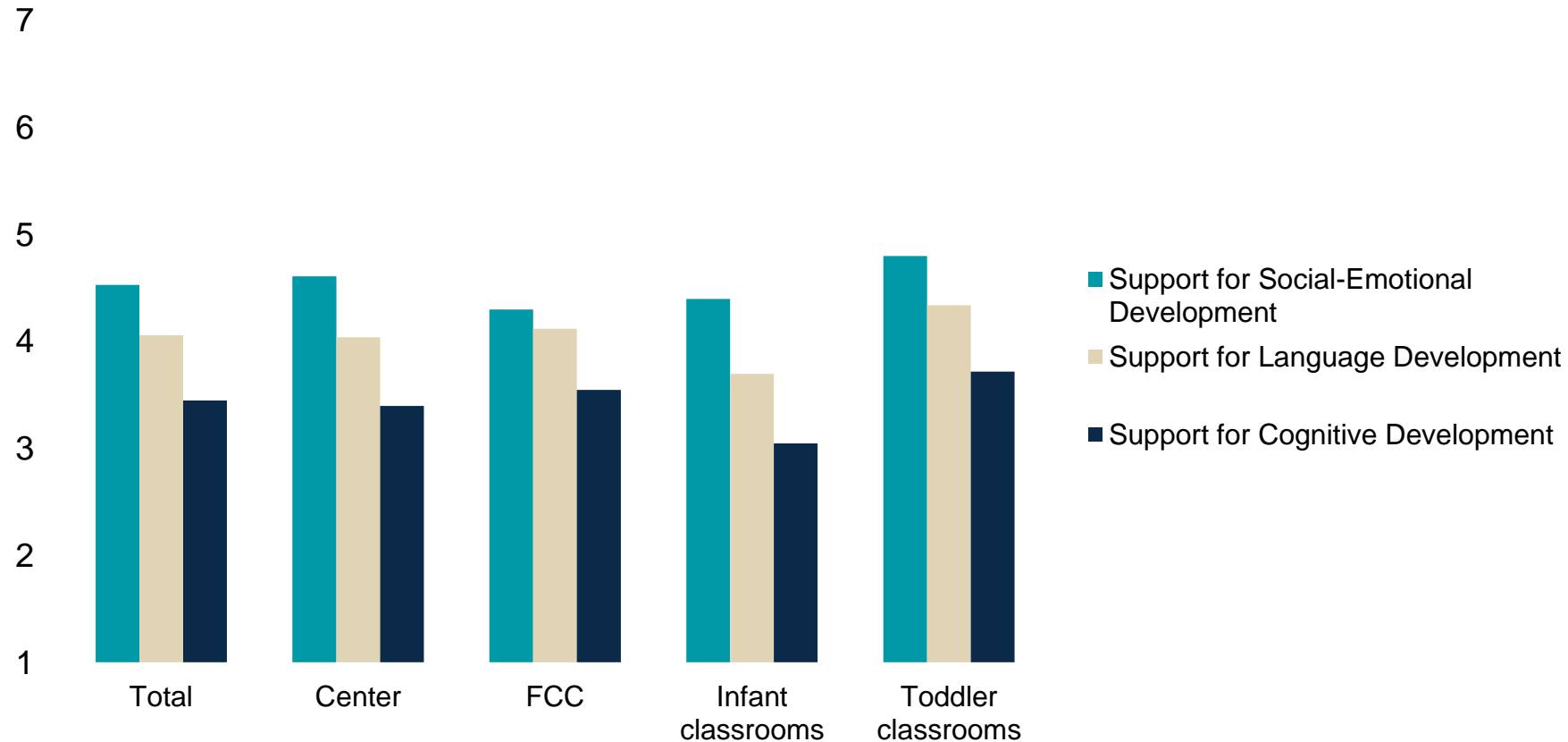
Q-CCIIT is reliable and valid

- Reliable measures can be obtained from Q-CCIIT
- Validity of the Q-CCIIT was supported
 - Confirmatory factor analysis
 - IRT models
 - Convergent validity evidence
 - Discriminant validity evidence
- Q-CCIIT is sensitive to the differences in quality

Mean scale scores, by setting and age groups



Across settings and age groups, consistently observed greater support for social-emotional development than for language and cognitive development.

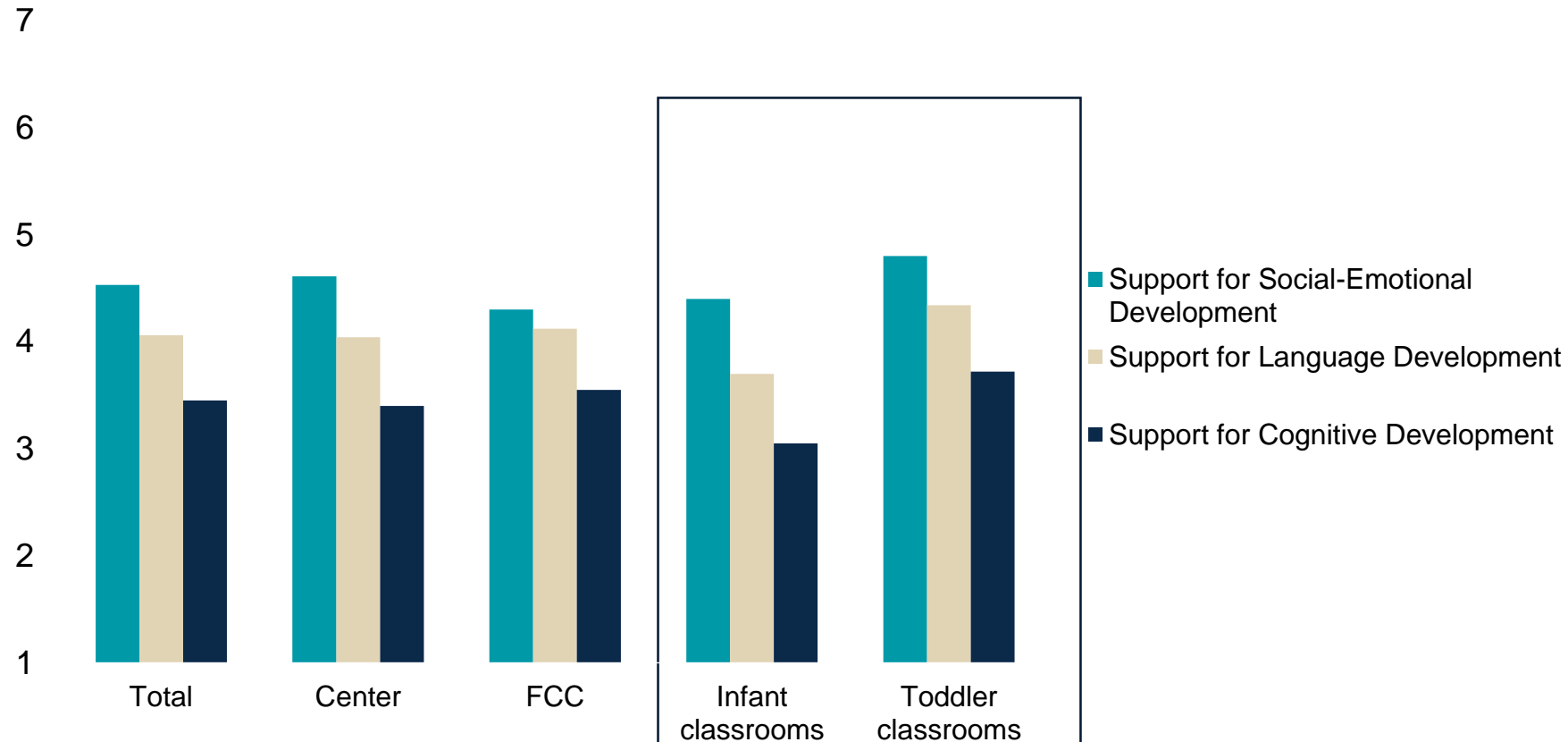


Atkins Burnett, et al. (2015)

Mean scale scores, by setting and age groups



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Atkins Burnett, et al. (2015)

Use with diverse populations

- The Q-CCIIT User's Guide provides guidance around cultural differences, age, and disability that need to be considered for every item
- 31 percent of the children in the psychometric field test were dual language learners; factor structure was similar to the overall factor structure
- Read more about the psychometric field test: *Measuring the Quality of Caregiver-Child Interactions for Infants and Toddlers (Q-CCIIT)*

How has Q-CCIIT been used to date?

- Psychometric field test (ACF)
- Early Head Start Family and Child Experiences Survey 2018 (Baby FACES; ACF)
- Local evaluations of Early Head Start-Child Care Partnerships
- Quality of Caregiver-Child Interactions for Infants and Toddlers Professional Development Tools Project (ACF): We Grow Together
- By a local program, university researchers, and higher education instructors



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Poll: Early care and education frameworks and resources

Which of these frameworks and resources do you use in your work?

- Center for Early Literacy Learning (CELL) resources
- Center on the Developing Child resources
- Center on the Social and Emotional Foundations for Early Learning (CSEFL) resources and the Pyramid Model
- NCECDTL 15-minute suites
- Head Start Early Learning Outcomes Framework (ELOF)
- National Association for the Education of Young Children (NAEYC) resources
- Practice Based Coaching (PBC)
- Strategies for Preschool Intervention in Everyday Settings (SPIES) for Parents
- Talk with Me Baby resources
- ZERO TO THREE resources

Q-CCIIT aligns with research based models



ELOF domains and associated subdomains	Q-CCIIT scales			
	Support for social and emotional development items	Support for cognitive development items	Support for language and literacy development items	Areas of concern topics
Approaches to learning Emotional, behavioral, cognitive self-regulation, initiative, curiosity, creativity	✓	✓	✓	✓
Social and emotional development Relationships with adult and with other children, emotional functioning, sense of identity and belonging	✓	✓	✓	✓
Language and communication Attending and understanding, communicating and speaking, vocabulary, emergent literacy		✓	✓	
Cognition Exploration and discovery, memory, reasoning and problem-solving, mathematical thinking, imitation, symbolic representation, play		✓		
Perceptual, motor and physical development		✓		✓

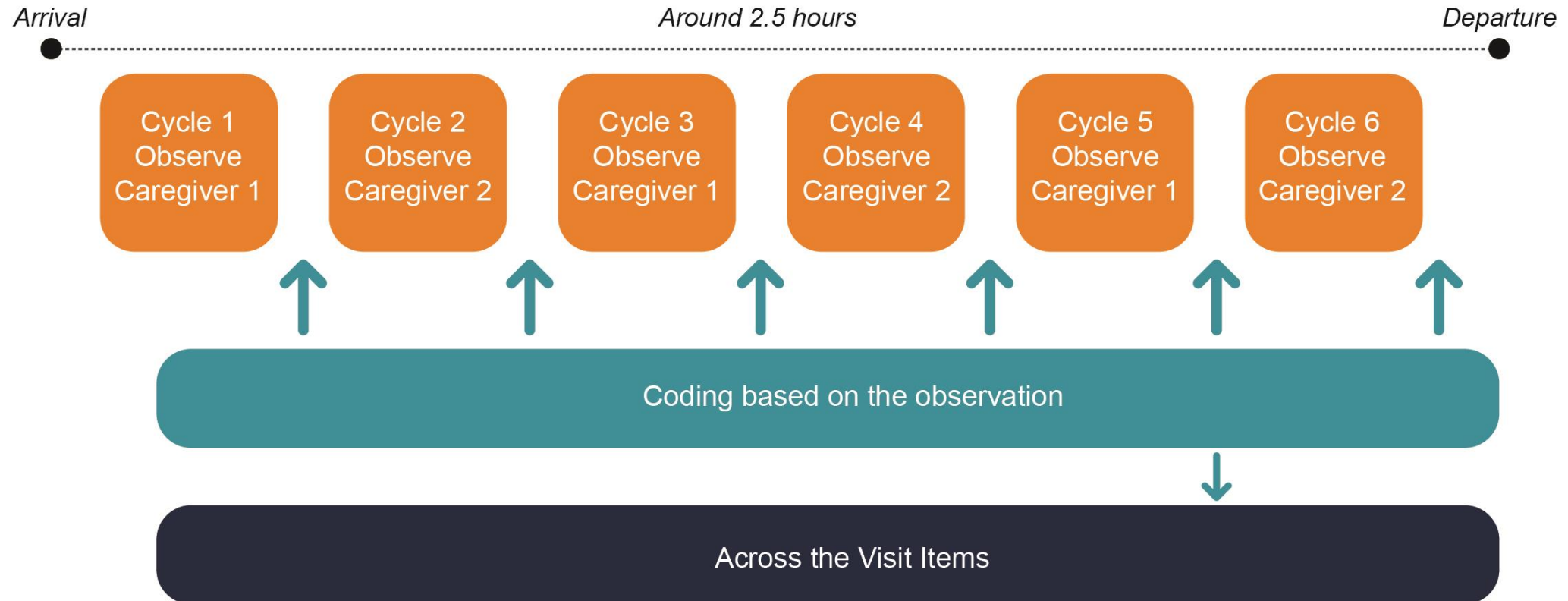
What makes Q-CCIIT unique?

- Addresses early childhood caregiving competencies across the 0-36 month age span
- Provides a single measure that can be used in multiple types of settings:
 - Single age infant classrooms
 - Single age toddler classrooms
 - Mixed age infant/toddler classrooms
 - Family child care classrooms (often mixed age)
- Same items, dimensions, and scores are available for infant and toddler classrooms
- Q-CCIIT also has unique content

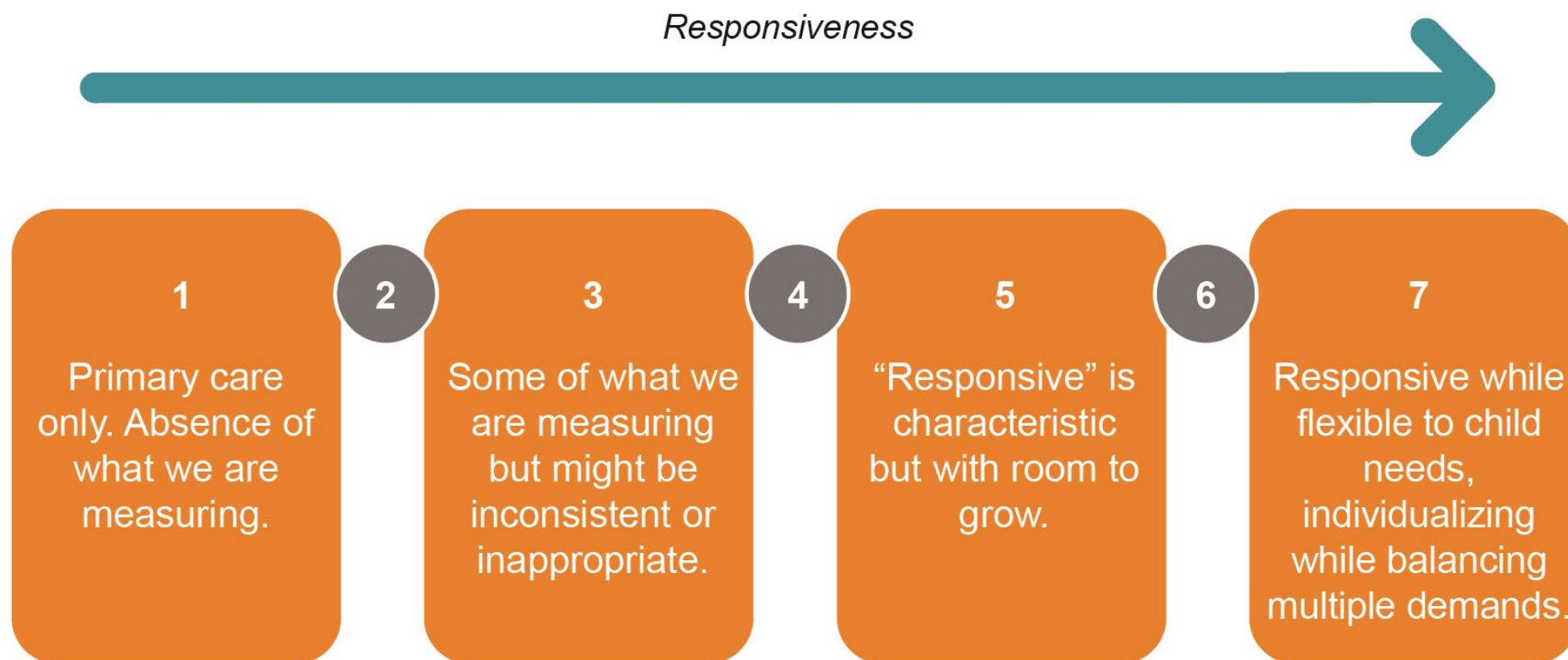


Understanding the Q-CCIIT instrument

How is an observation conducted?



A responsiveness scale





Supporting social and emotional development



- Responsiveness and relationships
 - Respond to social cues
 - Respond to emotional cues
 - Respond to distress
 - Building a positive relationship
- Support for peer interactions
 - Peer interaction/play
 - Support for social problem solving
 - Sense of belonging
- Supporting behavior management
 - Responsive routines
 - Classroom limits and management

Example of a social-emotional item



D4. Support for Social Problem Solving Among Peers: Caregivers help children learn to negotiate conflict with peers and help to reduce potential conflict situations. Caregivers may structure play to include adequate space and multiple toys and limited numbers of children in order to reduce the potential for conflict. Caregivers encourage and scaffold sharing among peers. Children may come to caregivers for assistance (for example, a child may tell a caregiver that another child is not sharing, or is taking a toy away from them). When conflict occurs, caregivers intervene but at the high end, caregivers support child-directed solutions rather than solving social problems for the children. **Code N/A if no social problems.**

1. No support for social problem solving is provided. Immediately removes child or object without any further assistance or follow up.	2.	3. May separate children or remove an object that is causing conflict WHILE providing limited verbal support for problem solving. Does not provide support for sharing other than telling children "to share." For infants, may distract or redirect a child as a way to resolve problem.	4.	5. Makes an attempt to help children solve a conflict through prompting or offering strategies. Models and scaffolds sharing or negotiating about objects or space.	6.	7. Supports and frequently encourages children to solve social problem(s) themselves. Anticipates potential social conflicts AND either rearranges environment OR provides other support before conflict escalates.
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Responding to distress activity



Has a delayed response to distress signals.

Ignores distress signals.

Provides a soothing response to distress. Almost every distress signal is responded to sensitively in some way.

Can balance needs of multiple children while responding to distress.

Responding to distress activity, continued



1. Ignores distress signals.

3. Has a delayed response to distress signals.

5. Provides a soothing response to distress. Almost every distress signal is responded to sensitively in some way.

7. Can balance needs of multiple children while responding to distress.

Supporting language development



- Types of talk that caregivers use
- Caregiver use of varied vocabulary
- Use of questions
- Conversational turn-taking
- Extending children's language
- Features of talk
- Talk about things not present

Use of questions activity

A variety of types of questions are asked AND supported.

No questions are asked.

Some questions are asked, but most are about the names of objects or are yes/no questions.

A variety of types of questions are asked. Some open-ended questions are asked as well as short close-ended questions.

Use of questions activity, continued

1. No questions are asked.

3. Some questions are asked, but most are about the names of objects or are yes/no questions.

5. A variety of types of questions are asked. Some open-ended questions are asked as well as short close-ended questions.

7. A variety of types of questions are asked AND supported.

Supporting literacy development

- Engaging children in books
- Variety of words
- Variety and types of sentences
- Positive attitudes toward books



Supporting cognitive development



- Basic concepts
- Supporting object exploration
- Scaffolding problem solving
- Giving choices
- Extending pretend play
- Explicit teaching
- Supervises or joins in play and activities

Example of a cognitive item

D1. Giving Choices: Making choices involves both cognitive and social development. For infants and toddlers, caregivers offer limited choices to help facilitate their success. Young children have difficulty understanding that once they choose one that means that they do not have the other. This is most evident with opposites—you can be up or you can be down but not both at the same time; you can be inside or outside. Also, children often pick the last thing said by a caregiver. Caregivers may need to support children in understanding this and allowing them to change their minds. Choices can be offered verbally or non-verbally. Authentic choices may include a yes/no question, where the caregiver accepts a “no” response (“Do you want milk?”). Choices must be authentic; an inauthentic choice might include saying, “do you want the book or the frog” at the same time as the caregiver hands the child the book. If all choices that are offered are not authentic choices (for example, children may be asked if they want to go outside or not when it is clear everyone has to go outside), score as a 2. **Code as N/A for infants who are 2 months or less (or developmentally delayed children without any physical control of their bodies).**

1. Children are not offered choices other than the availability of toys in the area.	2.	3. Offers a few authentic choices but does not always provide time for children to make the choice. For infants, caregivers may provide two toys for the child to choose from.	4.	5. Offers some authentic choices for children AND waits until children make a choice before moving on to another interaction AND without frustrating the child. Is sensitive to the difficulty children have in making choices AND allows children to change or pick an alternative.	6.	7. Often offers authentic choices for children AND comments on the child’s choice. Scaffolds choice making for children (e.g., limiting the number of choices, helping older children think through choices).
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Poll: Giving choices vignette



During free play, Ava picked the art center. The caregiver holds up two pieces of paper and says, “Would you like to use the white or blue paper?”

Ava says, “Blue paper.” As the caregiver puts the blue paper in front of Ava, Ava reaches for the other paper and says, “White!”

The caregiver replaces the blue paper with the white paper and says, “You would like the white paper instead? White will make a beautiful background for your picture.”

The caregiver gets out crayons and paint sticks and asks, “Ava, would you like to draw with crayons or paint sticks?”

Ava looks at the materials but does not respond.

The caregiver says, “I know, it’s a hard decision because they both are so fun to use! Remember, you don’t have to wait for the crayons to dry, but the paint sticks need time to dry.”

Ava picks the crayons and starts to color.

D1. Giving Choices: Making choices involves both cognitive and social development. For infants and toddlers, caregivers offer limited choices to help facilitate their success. Young children have difficulty understanding that once they choose one that means that they do not have the other. This is most evident with opposites—you can be up or you can be down but not both at the same time; you can be inside or outside. Also, children often pick the last thing said by a caregiver. Caregivers may need to support children in understanding this and allowing them to change their minds. Choices can be offered verbally or non-verbally. Authentic choices may include a yes/no question, where the caregiver accepts a “no” response (“Do you want milk?”). Choices must be authentic; an inauthentic choice might include saying, “do you want the book or the frog” at the same time as the caregiver hands the child the book. If all choices that are offered are not authentic choices (for example, children may be asked if they want to go outside or not when it is clear everyone has to go outside), score as a 2. **Code as N/A for infants who are 2 months or less (or developmentally delayed children without any physical control of their bodies).**

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Giving choices vignette, continued



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- The caregiver would receive a high score (5-7)

Areas of concern



- Physical safety
 - Unsafe practices or environment
 - Poor supervision
- Emotional safety
 - Verbal harshness
 - Favoritism or scapegoating
 - Ignoring children
 - Children unoccupied
- Inhibition of cognitive development
 - Restrictive behavior
 - Overwhelming children
 - Chaotic environment

What scores does Q-CCIIT provide?

- Item scores (across cycles)
- Scale scores for:
 - Support for Social and Emotional Development
 - Support for Language and Literacy
 - Support for Cognitive Development
 - Areas of Concern
- Typically at the classroom level; represent the “average experience of the children” in the classroom
- However, if using Q-CCIIT for professional development, can focus on a single caregiver

How might Q-CCIIT be used for professional development?

- Use instrument and link to external resources
- Used in preservice



ECEI's experience with the Q-CCIIT



ECEI's experience with the Q-CCIIT: Tulsa Educare (TEI)

- Educare:
 - Network of 25 school across the U.S.
 - Emphasize data use
- Q-CCIIT administered for 3 years in TEI's 36 mixed-age classrooms (6 weeks to 36 months)
 - 2017-18: Shared school and agency-level aggregated results with program leadership; Used to guide agency's PD planning
 - 2018-19: In addition, ECEI sent individual classroom feedback forms to Master Teachers and School Directors who shared with teachers
 - 2019-20: Currently administering; planning feedback as in 2018-19



Tulsa Educare (TEI) continued: Agency feedback



- TEI Site Director 1
 - Still learning new tool and how it can be used
- TEI Site Director 2
 - New and different perspective to inform planning, practice, and training
 - Helps recognize the difference between reactive forms of responsiveness (children in distress) and more attentive responsiveness (quiet children who can get ignored)
- ECEI:
 - Build understanding of what it really means to notice and respond to children's cues (even when subtle)
 - Diversity of Concepts item led to how to "dig in" to children's experiences or the intended concept
 - Encourages extended individual teacher-child conversations more than other tools



ECEI's experience with the Q-CCIIT: CAP Tulsa



- CAP Tulsa: large Head Start/Early Head Start agency that administers a state-wide program to enhance infant and toddler services (Oklahoma Early Childhood Program--OECP)
- CAP Tulsa/OECP: ECEI administering Q-CCIIT for the first time this year
 - Classrooms include:
 - 12 rooms for birth to 23 months
 - 14 rooms for birth to 36 month
 - 6 rooms for 2-year-olds
 - ECEI prepares feedback forms with brief narratives highlighting a few strengths and areas for development
 - PD Specialists from CAP Tulsa share classroom-level feedback with each partner/school
 - Full scores shared with CAP Tulsa administration; they are working on data analysis, interpretation, and actionable findings



CAP Tulsa continued: Agency feedback



- Strong tool for measuring infant/toddler classrooms
- Appreciate it was specifically designed for infants and toddlers
- Aligned with the appropriate classroom practices agency wants to promote
- Produces “actionable” information



ECEI's experience with the Q-CCIIT



Strengths

- Detailed information to inform PD
- More fine-grained information about teacher-child interaction; including more attention to individual children's experiences
- More information about early literacy and book reading
- Areas of Concern includes items overlooked in other tools such as unoccupied children, overwhelmed children, etc.

Challenges and Opportunities

- Q-CCIIT is detailed and thus much to remember when learning/administering
- Required more training to become reliable than with some other commonly used tools
- As a new tool, still learning how to understand, interpret, and communicate results
- Agency partners suggested different feedback forms for different purposes/roles (e.g., details for coaches, global for teachers)



Bringing Q-CCIIT to the field

Building momentum



Q-CCIIT training is now available!

- Observer certification training

Pre-training	Day 1	Day 2	Day 3	Day 4	Post-training
Online modules	In-person training (Social-Emotional Scale)	In-person training (Language Scale)	In-person training (Cognitive and Areas of Concern Scales)	In-person training (Bringing it all Together)	Online video certification

- Annual recertification (one year from now)
- Training of Trainers (later this year)

Upcoming training



- Q-CCIIT Observer Certification Training
June 16-19th in Washington, DC
- More trainings available



What skill-set does a Q-CCIIT observer need?



No specific requirements beyond certification and relevant language skills for the setting

However, we recommend the following:

- Familiarity with early childhood settings
- Commitment to observing fairly by applying the Q-CCIIT codes (objectivity) and administering and coding the measure as learned in training (fidelity)
- Careful attention to detail
- Accurate note-taking skills
- Ability to use evidence to support scores
- Physically able to sit in low chairs or on floors and/or stand for long periods of time

Key features of Q-CCIIT

- Based on research and evidence about interactions with infants and toddlers
- Strong reliability and validity
- Appropriate for a variety of classroom settings, (center-based and home-based child care)
- Flexible for use in culturally and linguistically diverse settings
- Training, manual, instructions for use, and support available
- Alignment with the Head Start Early Learning Outcomes Framework (ELOF)

Contact us

- By email: QCIT@mathematica-mpr.com
- By phone: 1-833-QCIT123 (833-724-8123)
- Visit mathematica.org/toolkits/q-cciit

Thank you!