

**Quality in Child Care and How to Measure It:
The Environment Rating Scales
Training Module
version 4**

(Last updated 2/6/2013)

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NOTE TO TRAINER

This Training Module presents information on using the Environment Rating Scales to measure quality in child care programs. The Toolkit includes a Trainer's Guide to leading training sessions, PowerPoint slides, and materials for participants' packets.

For more information about using the NTI materials, please read "Guidelines for Using the NTI Curriculum Materials," available in the "Curriculum" section of the NTI Resources Website (accessed by entering your NTI username and password at <http://sakai.unc.edu>.)

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LEARNING OBJECTIVES

After reading this Module, Trainers will be able to:

- Identify the three basic components of quality care and the aspects of the child care program that fall under each of these components,
- Describe preferred methods for using the Environment Rating Scales; and
- Describe three ways that a child care health consultant can assess a child care program and identify improvement strategies to enhance quality.

INTRODUCTION: THE ROLE OF THE CCHC

Health and safety provisions are crucial aspects of quality care (Vandell & Wolfe, 2000). When childcare health consultants are involved in early care and education settings, they are shown to be well received by childcare staff, and the quality of child care as well as child health indicators improve (Alkon, Sokal-Gutierrez, & Wolff, 2002; Crowley, 2000; Kotch et al, 2003). To play a significant role in improving the health and safety and overall quality of child care programs, the child care health consultant (CCHC) should (1) develop competence in using a guided observation tool for rating quality in child care settings; (2) develop good observational skills through practice in child care settings; and (3) apply collaborative consultation skills in making a plan of action to improve quality in child care settings. This Module will introduce NTI Trainers to one such guided observation tool, the Harms, Clifford and Cryer Infant-Toddler Environment Rating Scale, and will explain how Trainers might use this tool to assess and promote quality in child care classrooms.

Child care health consultation, in its broadest sense, focuses on not only physical health (e.g., nutrition, safety, measures to reduce infectious disease), but also social-emotional and cognitive development. By observing in a classroom for several hours using the appropriate Environment Rating Scale, the CCHC can become acquainted with the day-to-day functioning of the child care program. The CCHC should supplement these observations with active listening to the staff about how the program operates, what they think are the best features of the program and what they think should be improved. Such reality-based understanding enables the CCHC to provide practical, relevant support and encouragement to the child care staff for the improvement of quality. Knowledge of the realities of child care helps the CCHC to adopt health-related materials and approaches for implementation in specific child care settings.

During periodic visits to a child care facility, the CCHC has the opportunity to become familiar with the unique nature of that program. Each CCHC will have individual areas of expertise and experience to draw from. For example, some may be prepared to share health-related information, but needs in the social-emotional or cognitive/language areas may fall outside their realm of expertise. Whatever knowledge-base and areas of expertise the CCHC has, effective referrals can be facilitated through identification of and collaboration with individuals in related disciplines, as well as knowledge of community resources. Having a comprehensive understanding of the basic components of quality child care helps the CCHC play a significant role in the improvement of the child care program. Trainers should review the NTI Training Module *Building Consultation Skills* for additional information on making referrals and providing consultation to child care programs.

A CCHC should always take care to use any quality assessment tools in combination with observations of other aspects of the program not directly measured by a particular quality assessment tool, knowledge of state regulations and the specific needs of the child care program. CCHCs need to know their state regulations so when they explain to program staff what improvements might be needed based on evaluation efforts, they are able to discuss the difference between national standards, the indicators in the Environment Rating Scale, and state regulations. This helps to improve program staff knowledge and to prioritize needed improvements.

In addition to the Environmental Rating Scales, other quality measures include the Adult Interaction Scale, the Comprehensive Early Language Scale, the Caregiver Involvement Scale, the Classroom Assessment Scoring System, and the Observational Rating of the Caregiving Environment. Each has strengths and limitations. (Burchinal et al., 2011)

What the CCHC Should Know: Basic Components of Quality in Child Care

Harms (1997) proposes three basic components of quality in child care. In order to provide quality child care, programs should strive to meet the individual and group needs of children in these three areas:

- **Physical:** Protection of children's health and safety and prevention of abuse and neglect
- **Social/Emotional:** Building relationships with children, parents/guardians, extended family, and community
- **Cognitive:** Opportunities for stimulation and learning from experience

Each of these three components has environmental, supervisory, and curricular implications and is equally applicable to family home and child care center settings.

No single component is more or less important than the others. It takes all three to create quality care. Recently, health and safety have re-emerged as areas of interest that had previously been neglected. A quality child care facility prioritizes all three components and seeks to balance the way they are addressed. In some cognitively-oriented programs, the emotional well-being of children may be undervalued. In programs focused on emotional warmth, little attention may be paid to developing thinking and language skills. The outline on the following page shows how each of these is exemplified in the child care setting.

Basic Components of Quality of Life for Early Childhood Education Programs

I. Protection

A. Health

1. Nutrition and physical activity
2. Sanitation
3. Personal hygiene, oral health, adoption of healthful behaviors and appropriate self-help routines
4. Measures to reduce infectious diseases in group settings (e.g., hand hygiene)
5. Parent/guardian education materials and referrals

B. Safety

1. Precautions to avoid injury from mishaps (e.g., playground surfacing)
2. Precautions to avoid injury from aggressive behavior
3. Supervision
4. Prevention of abuse and neglect
5. Parent/guardian education materials and referrals

II. Building relationships

A. With children

1. Separation from parents/guardians
2. Continuity of care; primary caregiver/teacher
3. Positive approaches to discipline
4. Development of social skills

B. With parents/guardians

1. Opportunities for communication
2. Building trust over time
3. Parent/guardian communication and education
4. Anti-bias approach, cultural competency
5. Tuned in to the child's family and community

III. Opportunities for stimulation and learning

A. Variety of hands-on activities

B. Appropriate for group and individual needs

C. Many open-ended materials

D. Schedule that handles routines gracefully and leaves ample time for activities

E. Concepts brought out of play

(Adapted from Harms T. Basic components of quality of life for early childhood education programs. Unpublished 1997, reproduced with permission)

What the CCHC Should Know: Approaches to Measuring Quality

There are two major approaches to measuring the quality of early childhood programs. One approach uses *structural* indicators of the program such as staff-child ratio, group size, teachers'/caregivers' educational levels, documentation of up to date immunizations, and square footage per child. Structural indicators form the basis for out-of-home child care regulation and their importance for ensuring that quality care has been documented (Cassidy, et al., 2005). The other approach measures quality through observation of ongoing *processes*, such as staff-child, child-child, staff-staff, and staff-parent/guardian interactions, and the interactions staff and children have with the early childhood setting and materials. The latter approach is called process quality assessment.

It has been suggested that structural indicators provide the foundation for process indicators but are not direct influences on the quality of care and education that children receive. For example, high quality interactions between teachers and children are more likely to occur in classrooms where teacher/child ratios are low and teachers have higher levels of education (NICHD, 2005a). Vandell and Wolfe (2000) provide a summary of the research demonstrating the relationship between structural and process quality. They report that most research findings in the child care quality literature have indicated a significant relationship between structural characteristics and process quality. The NICHD Early Child Care Research Network (2002) also documented associations between structural and process quality and child outcomes. In this large-scale study, the authors found that structural quality directly affected process quality, and process quality in turn influenced children's outcomes. The results revealed positive associations between caregivers' training, and the quality of care-giving behaviors (e.g., sensitivity, stimulating, etc.).

The Harms, Clifford and Cryer Environment Rating Scales

Although several organizations and individuals have described indicators and assessments of quality child care (see "Where To Find More Information" for additional quality indicators from the AAP, California Childcare Health Program, NAEYC, and Fiene's *13 Indicators of Quality Child Care*), NTI promotes the use of the Harms, Clifford and Cryer Environment Rating Scales because they offer clear, proven guidelines for how to measure each quality indicator. The scales are also compatible with the standards set out in *Caring for Our Children: National Health and Safety Performance Standards: Guidelines for Early Care and Education Programs*, 3rd Ed., (2011), upon which the NTI curriculum is based.

The Harms, Clifford and Cryer Environment Rating Scales (ECERS-R, ITERS-R, FCCERS-R and SACERS) are designed to assess process quality in an early childhood or school-age care setting, although recent research (Cassidy, et al. 2005) suggests over half of the indicators for the ECERS-R are actually measuring structural rather than process quality. Although these findings may suggest the ECERS-R is actually a more comprehensive measurement tool, further research is needed in this area.

There are four Environment Rating Scales, each designed for a different segment of the early childhood population:

- **ITERS-R (2003) The Infant/Toddler Environment Rating Scale-Revised:** Designed to assess group programs for infants and toddlers ages birth to 2½ years. Total scale

consists of 39 items. The ITERS-R is a revision of the original ITERS (1990). The scale is also available in Spanish.

- **ECERS-R (2005) The Early Childhood Environment Rating Scale-Revised:** Designed to assess group programs for preschool through kindergarten-aged children, from ages 2 ½ through 5 years. Total scale consists of 43 items. The ECERS-R is a revision of the original ECERS (1980). The 2005 edition is an updated version of the 1998 ECERS-R. This scale is also available in Spanish.
- **FCCERS-R (2007) The Family Child Care Rating Scale-Revised:** Designed to assess family child care programs conducted in a caregiver’s home with infants and children from birth through school-age. Total scale consists of 37 items. The FCCERS-R is a revision of the original FDCRS (1989).
- **SACERS (1996) The School-Age Care Environment Rating Scale:** Designed to assess before- and after-school group care programs for school-age children, ages 5 to 12 years. The total scale consists of 49 items, including 6 supplementary items for programs enrolling children with disabilities.

Characteristics of the Environment Rating Scales

- Each of the scales has items to evaluate physical environment, basic care, curriculum, caregiver/teacher/child interaction, schedule and program structure, and provisions for parents/guardians and staff.
- The scales are suitable for use in evaluating inclusive and culturally diverse child care programs. Inclusive programs are those that enroll children with special needs along with typically developing children.
- The scales have proven reliability and validity, which make them suitable for use in research and program improvement.
- Each scale has a complete training program, which includes visits to area classrooms for practice observations and scoring and follow-up analysis under experienced group leaders. Self-study training packets are available for the ITERS-R, ECERS-R, and FCCERS-R and include training workbooks and interactive videos.
- It is important to note here that each scale consists of items that were found to be predictive of quality, but they do not provide a comprehensive assessment of quality. The selection of predictive items eliminates from the assessment those items which are most likely to be performed well by many programs or are rarely performed well. For example, the Environment Rating Scales do not address management or documentation of injuries, emergency preparedness, plans to care for children with special needs, staff health, or policies and procedures for activities which may not be observable in the classroom at a particular time.

The Importance of Observation

Observation is an essential tool for consultation. It is the key to understanding the current child care situation so practical recommendations can be made for improvements in child care quality. A good observer minimizes the effect of his/her presence on the classroom. See the “Classroom Observation Guidelines” in Appendix A for appropriate observer behavior. The ITERS-R is presented in the NTI training as a comprehensive guided observation to assess the global, or overall, quality of a center-based child care setting for infants and toddlers.

Research Use of the Environment Rating Scales

Because quality of child care is such a strong predictor of school and social success the ECERS, ECERS-R, ITERS, and ITERS-R have been used in many prominent studies as a comprehensive measure of quality.

Measure Quality for Research: The Environment Rating Scales have been used to measure quality in research settings. *Welfare, Children and Families: A Three-City Study* used the ECERS to measure quality of child care for low-income children in relation to its accessibility and flexibility for mothers (Levine Coley, Chase-Lansdale, and Li-Grining, 2001). Results of the study found that child care centers had higher levels of quality than both regulated and unregulated in-home care. The state of Minnesota used the ECERS-R in its first statewide observational study of quality in Minnesota child care centers (Tout, Sherman, and Child Trends, 2005). The overall quality of child care centers in Minnesota was on average above minimal, with 25% of the centers reporting scores equal to good quality. While this study did not focus on program improvement, the results from this study may provide information on where programs in Minnesota can focus their improvement efforts.

Measure Quality for Program Improvement: The second use of the Environment Rating Scales is measuring quality with the intent of using the results for program improvement. The scales are used in a variety of ways including self-assessment by program staff, preparation for accreditation, and voluntary improvement efforts by licensing or other agencies. The following are a few examples of how the scales have been used for program improvement, both in the United States and around the world:

- North Carolina uses the Environment Rating Scales as part of a rated licensing system. While every program and family child care home must meet basic requirements, they can voluntarily apply for higher ratings based on a set of quality measures. For those that provide subsidized care, higher ratings earn the caregiver an additional fee.
- Pennsylvania has institutionalized the use of the Environmental Rating Scales by making achievement of certain scores on the ERS necessary for specific levels of recognition in Keystone STARS, the state's Quality Rating Improvement Systems.
- Connecticut and Colorado both use the scales to support inclusion; Connecticut for the inclusion of children with special needs and Colorado for children from ethnically diverse and impoverished families.
- In Arkansas the scales are used to support technical assistance efforts tied to federal funding for improving child care programs.
- In Canada the scales have been used in both English and French and are in many areas a voluntary part of the licensing visit. With the cooperation and input of the child care caregiver/teacher, the Environment Rating Scales are used to set improvement goals based on the measurement results.

(Environment Rating Scales Institute, 2011)

Measure Quality to Predict Success: Experimental studies of high-quality early intervention programs have demonstrated these programs can enhance social, cognitive, and academic development of economically disadvantaged children (Campbell et al., 2001; Love et al., 2005; Reynolds, 2000). Correlational studies of economically and ethnically diverse

samples also have fairly consistently found higher quality child care to be associated with better cognitive and academic outcomes (Burchinal et al., 2000; Cote et al., 2007; Gormley, Gayer, Phillips, & Dawson, 2005; Mashburn et al., 2008). Recent research also suggests these gains made in high quality early childhood programs can be measured even into adolescence (NICHD, 2010). Within the Early Head Start Research and Evaluation project, the ECERS was used to measure the quality of Early Head Start (EHS) child care and child outcomes. Analysis of the results from the study found that the amount of quality within EHS programs was positively associated with developmental outcomes for EHS children (US Department of Health and Human Services [US DHHS], 2004). Head Start's FACES 2000, the Family and Child Experiences Survey, used the ECERS-R to measure quality in relation to outcomes for children in Head Start classrooms. FACES 2000 involved a nationally representative sample of 3- and 4-year-olds and provided information on the children at entry into Head Start and outcomes at the end of the first year as well as elementary school (US DHHS, 2006). Overall classroom quality was high and children who attended Head Start for two years showed greater gains than those who had attended for only one year.

The Use of the Environment Rating Scales for Accreditation and Credentialing

The early childhood field is currently promoting voluntary accreditation for programs and credentialing for staff as approaches to improve quality. The content of the Environment Rating Scales is supportive of the observation instruments used in the various accreditation and credentialing systems. In addition, the "levels of quality" format of the scales is particularly helpful during the process of preparation for accreditation and credentialing because it provides clear guidelines for step-by-step improvement. The concrete, practical indicators are easy to understand and apply.

Well known examples of such systems are the center accreditation offered by the National Association for the Education of Young Children (NAEYC), the family child care home accreditation offered by the National Association for Family Child Care (NAFCC), and the school-age care accreditation offered by the National After School Alliance (NAA, formerly the National School-Age Care Alliance). The Council for Early Childhood Professional Recognition offers the Child Development Associate credential for child care staff. Each of these quality recognition programs includes an observation instrument to assess quality in an early childhood setting.

- NAEYC's accreditation process involves four steps. The purpose of step one is to encourage child care centers to engage in a structured approach to program improvement that considers all of the necessary components of a high quality program. To meet this requirement, programs complete a self-study process that includes evaluating their performance using tools developed by NAEYC and others. After completion of the process, centers submit applications to formally begin the accreditation process as well as indicate they are ready and able to complete comprehensive and formal self-assessment within one year. Once the formal self-assessment has been completed, programs prepare for an onsite assessment by NAEYC. The independent assessment by NAEYC ensures the program has met each of the ten NAEYC Early Childhood Program standards. Programs that receive accreditation must show evidence of sustained quality over five years through

annual reports and random unannounced visits. Complete accreditation standards are available at: <http://www.naeyc.org/academy>.

- NAFCC is the only national organization to accredit family child care programs. The NAFCC Accreditation Quality Standards address five areas of quality: relationships, environment, developmental learning activities, safety and health, and professional and business practices. Accreditation must be renewed every three years. The complete accreditation standards are available at: <http://nafcc.org/media/pdf/accreditation/NAFCCQualityStandardswith2013Updates.pdf>
- NAA requires programs to engage in self-study, as well as meet the NAA Standards for School-Age Quality. The standards address indicators of quality programs that are reflected in current research and examples include involving children and youth in program planning and ensuring a safe and challenging environment for children and youth. Accreditation must be renewed every three years. NAA offers an accreditation training program to inform programs about the process and requirements. Additional information is available at: <http://www.naaweb.org/>.

ACTION ITEMS FOR THE CCHC

As a health consultant to the child care program, the CCHC should:

- Use the appropriate Environment Rating Scale (ITERS-R, ECERS-R, FCCERS-R, or other guided observation instrument) to identify areas of strengths and areas of needed improvement in child care programs;
- Upon request, train members of the child care staff to use guided observation instruments for self-assessment of the quality of their programs,
- Look at aspects of quality that are not measured by the ERS, particularly structural indicators such as class size and caregiver education;
- Plan collaboratively with the child care staff to improve the quality of their programs,
- Provide the child care staff with training in the CCHC's areas of competence,
- Identify additional training resources for needs outside the CCHC's areas of competence,
- Follow up to see if plans for improvement are implemented.

On the other hand, as a health consultant, the CCHC should not:

- Use any Environment Rating Scale to evaluate a child care facility for any purpose other than consultation; and
- Share the subscale scores or overall environmental rating scale scores of a child care facility with any outside agency, organization, or regulatory body, including the state child care regulatory agency.

WHERE TO FIND MORE INFORMATION

Basic Components of Quality in Child Care

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Zero to Three

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LIST OF APPENDIXES

Appendix A: ITERS-R Handouts

- Additional Notes for Clarification of the ITERS-R
- Classroom Observation Guidelines
- Group Leader Guidelines
- Plan of Action Form
- Video Guide and Training Workbook for the Infant/Toddler Environment Rating Scale-Revised (ITERS-R)
- ITERS-R Score sheets
- ITERS-R Inter-rater Reliability Form
- Playground Safety Information
- Meal Guidelines - Infants
- Meal Guidelines - Ages 1-12

Appendix B: Unpublished Manuscripts Cited in Text

- Cryer D. What is high quality child care? Is it really important? Unpublished manuscript; 1999.
- Smith S. The past decade's research on child care quality and children's development: What we are learning, directions for the future. Child Care in the New Policy Context Meeting of the National Institutes of Health; Apr 30 - May 1, Bethesda (MD); 1998.

Note: All appendix items are distributed on-site at the NTI training in Chapel Hill. The items in Appendix A can also be accessed online at: <http://www.ersi.info/index.html>, with the exception of the Classroom Observation Guidelines and the Group Leader Guidelines. Those two documents are available on the NTI Resources Website.