

Determining QRIS Ratings Using Cut Points on Observational Tools

States use observational tools that assess quality features in early care and education programs almost universally across quality rating and improvement systems (QRISs). While states may use these tools in QRISs for multiple reasons, they typically use scores from these tools as one factor in determining ratings. Using observational tools in this way requires QRISs to set cut points—certain scores programs must achieve—to assign points or quality levels. Though many QRISs use the same observational tools, the set cut points often differ. Decisions about setting cut points may be informed by pilot data collected in a state, or recommendations from tool authors or research studies. Contextual factors in states also play a role, such as the rigor of the underlying child care licensing standards, the strength of the early childhood professional learning system, and the supports available for improving the quality of early learning settings. States may also decide to modify cut points after testing how they function in the system and their effect on ratings.

This fact sheet is one of a series about the state of QRISs in the United States. As of 2017, there are 44 fully operational QRISs in the United States.¹ Data are from the [Quality Compendium](#), a catalog of the QRISs operating in the United States as of December 31, 2017.

This fact sheet summarizes information from the Quality Compendium.² We provide a descriptive analysis of the information to show how QRISs are incorporating scores and setting cut points on the most commonly used observational tools. For more background on how states are using these tools, please read the 2016 fact sheet [Use of Observational Tools in QRIS](#).

Using Observational Tool Scores in QRIS Ratings

QRISs use different methods to incorporate scores from observational tools into ratings. In a block structure, the score on the observational measure is one determinant of the final level a program will achieve. In a QRIS with a point structure, programs receive a specified number of points depending on the score achieved on the tool. These points are then added to points earned from meeting (or partially meeting) other quality standards to determine a final rating. QRISs that use hybrid structures may assign points or determine levels using scores on observational tools.

When using observational tools in the QRIS rating process (regardless of the system structure), QRISs make a set of decisions about cut points for scores that will be used. Next, we describe data on cut points used in QRISs for the most commonly used tools—the ECERS-R³/ECERS-3⁴, ITERS-R⁵, and FCCERS-R⁶ from the

¹ States with a QRIS: AK, AR, AZ, CA, CO, DC, DE, FL (three localities), GA, IA, ID, IL, IN, KY, LA, MA, MD, ME, MI, MN, MT, NC, ND, NE, NH, NJ, NM, NV, NY, OH, OK, OR, PA, RI, SC, TN, TX, UT, VA, VT, WA, WI. While most QRISs operate at the state level, three represent separate counties in Florida (Duval, Miami-Dade, and Palm Beach). The California QRIS, while represented in the Quality Compendium as one system, is implemented at the county level and does not include all counties in the state.

² The “Quality Compendium” was previously named the “QRIS Compendium”.

³ Harms, T., Clifford, R. M., & Cryer, D. (2005). Early childhood environment rating scale, Revised edition (ECERS-R). New York, NY: Teachers College Press.

⁴ Harms, T., Clifford, R. M., & Cryer, D. (2014). Early childhood environment rating scale, Third edition (ECERS-3). New York, NY: Teachers College Press.

Environment Rating Scales (ERS) suite of measures and the Pre-K Classroom Assessment Scoring System (CLASS).⁷

Additional information about the structures of QRIS rating systems is available in the 2016 fact sheet, [Rating Structures and Processes](#).

Block Structures

To understand how QRISs with block structures incorporate observational tools, it is helpful to examine the cut points QRISs set at different quality levels. It is important to note that QRISs differ in the number of quality levels and in the inclusion of observational tools at each level. The data on cut points were included in this fact sheet for all QRISs with block structures, even if the QRIS had only three or four levels. Table 1 presents the cut points on the ERS tools across five QRIS quality levels. It shows the number of QRISs with score cut points at each quality level, the average cut point by QRIS level, and the minimum and maximum scores recognized in the QRIS at each quality level. If the QRIS specified a range of scores to achieve a quality level, the lowest score was included in the analysis. For example, if a QRIS requires a program to score between a 3.0 and a 4.0 on the ECERS-R to achieve a Level 2, 3.0 was the score analyzed at Level 2 for this QRIS.

For QRISs that have a block structure, a set of quality indicators must be met in full before a program can receive the rating for that level.

Key findings about ERS cut points are as follows:

- ◆ More QRISs set cut points for ERS scores at higher quality levels compared to lower levels. Only 2 QRISs specify cut points at Level 1, and 6 QRISs specify cut points at Level 2. More QRISs specify cut points at Levels 3 (14 QRISs), 4 (17 QRISs), and 5 (14 QRISs).
- ◆ Across the five levels of quality, the average cut points vary by 3.05 points for ECERS-R/ECERS-3, by 2.77 points for ITERS-R, and by 2.83 points for FCCERS-R.
- ◆ The average cut points for scores get incrementally higher with each rating level.

⁵ Harms, T., Cryer, D., & Clifford, R. M. (2006). *Infant/toddler environment rating scale, Revised edition (ITERS-R)*. New York, NY: Teachers College Press.

⁶ Harms, T., Cryer, D., & Clifford, R. M. (2007). *Family child care environment rating scale, Revised edition (FCCERS-R)*. New York, NY: Teachers College Press.

⁷ Pianta, R. C., La Paro, K. M., & Hamre, B. K. (2008). *Classroom assessment scoring system (CLASS), Pre-K*. Baltimore, MD: Paul H. Brookes Publishing Company, Inc.

Table 1. Environment Rating Scales Average Cut Points by Rating Level and Tool

Observation Tool	QRIS Level ¹				
	Level 1	Level 2	Level 3	Level 4	Level 5
ECERS-R/ECERS-3					
Number of QRISs ²	2	6	14	17	14
Minimum Score Recognized	1.00	2.00	3.00	3.25	4.50
Maximum Score Recognized	3.00	4.00	4.50	6.00	5.75
Average Cut Point	2.00	3.08	3.76	4.44	5.05
ITERS-R					
Number of QRISs ²	3	8	17	19	16
Minimum Score Recognized	1.00	2.00	2.00	3.25	4.50
Maximum Score Recognized	3.50	4.00	5.50	6.00	6.00
Average Cut Point	2.33	3.06	3.76	4.44	5.10
FCCERS-R					
Number of QRISs ²	2	7	16	17	14
Minimum Score Recognized	1.00	2.00	3.00	4.00	4.50
Maximum Score Recognized	3.50	4.00	5.50	6.00	5.75
Average Cut Point	2.25	3.07	3.84	4.48	5.08

Source: Analysis of data retrieved from the Quality Compendium, 2017, <https://qualitycompendium.org/>

Notes: Some QRISs are in multiple categories. Scores on the ERS tools range from 1–7.

¹ QRISs differ in the number of quality levels and in the inclusion of observational tools at each level. The data on cut points were included for all QRISs, even if the QRIS had only three or four quality levels.

² The number of QRISs includes all systems that have cut points for ERS scores at each QRIS level.

Table 2 shows the average cut points set on the CLASS Pre-K organized by domain and quality level (similar to the presentation in Table 1).

Key findings for the CLASS Pre-K are as follows:

- ◆ The cut points reflect research findings on the patterns of scoring for the CLASS Pre-K subscales. Studies have shown that programs typically score higher on the Emotional Support subscale, in the mid-range on the Classroom Organization subscale, and lower on the Instructional Support subscale.⁸ The average cut points set by QRISs match this general pattern.
- ◆ Overall, the range of CLASS Pre-K average cut points by quality level and domain are narrow. Across the five levels of quality, the average cut points vary by 1.46 points for Emotional Support, by 2.25 points for Classroom Organization, and by 2.96 points for Instructional Support.

⁸ Early Childhood Learning & Knowledge Center, Office of Head Start, Administration for Children and Families, U.S. Department of Health and Human Services. (2016). A national overview of grantee CLASS® scores in 2016. Retrieved from <https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/national-class-2016-data.pdf>

- ◆ In all but one case, the average cut point for scores gets incrementally higher with each rating level. Again, the cut points follow scoring trends for the CLASS Pre-K subscales.

Table 2. CLASS Pre-K Average Cut Points by Rating Level and Domain

CLASS Pre-K Domain	QRIS Level ¹				
	Level 1	Level 2	Level 3	Level 4	Level 5
CLASS Pre-K Emotional Support					
Number of QRISs ²	2	3	6	8	7
Minimum Score Recognized	4.00	3.00	4.00	4.00	5.00
Maximum Score Recognized	4.50	5.00	6.50	6.00	6.00
Average Cut Point	4.25	4.17	4.92	5.13	5.71
CLASS Pre-K Classroom Organization					
Number of QRISs ²	2	3	6	8	7
Minimum Score Recognized	3.00	3.00	4.00	4.00	5.00
Maximum Score Recognized	3.50	4.00	5.50	5.00	6.00
Average Cut Point	3.25	3.50	4.42	4.81	5.50
CLASS Pre-K Instructional Support					
Number of QRISs ²	2	3	7	9	7
Minimum Score Recognized	1.00	1.50	2.00	2.50	3.00
Maximum Score Recognized	1.00	3.00	4.00	5.00	6.00
Average Cut Point	1.00	2.00	2.57	3.08	3.96

Source: Analysis of data retrieved from the Quality Compendium, 2017, <https://qualitycompendium.org/>

Notes: Some QRISs are in multiple categories. Scores on the CLASS tools range from 1–7.

¹ QRISs differ in the number of quality levels and in the inclusion of observational tools at each level. The data on cut points were included for all QRISs, even if the QRIS had only three or four quality levels.

² Number of QRISs includes all systems that have cut points for CLASS scores at each QRIS level.

Point Structures

To understand how QRISs incorporate observational tools in point structures, it is useful to examine the range of scores for which programs can earn points. Scoring rubrics in point structures have a range of minimum and maximum scores. QRISs may also incorporate more complex scoring criteria. For example, QRISs may specify three separate ranges of scores and assign a point value for each range. However, to facilitate comparison across systems, this analysis focuses on the overall range and averages for the minimum and maximum scores recognized in the rating.

For QRISs that have a points structure, points are awarded for meeting each quality indicator. A summary score is created by adding the points from each indicator and then assigning the program to a quality level based on the number of points earned.

- ◆ Seven QRISs assign points for ERS scores. In each QRIS, the same minimum and maximum scores are specified for the ECERS-R/ECERS-3, ITERS-R, and FCCERS-R tools, as shown in Table 3. Across the tools, the average minimum score programs need to earn any points is 3.82, with a range from 3.0 to 5.0. The average maximum score a program can receive points for is 5.36, with a range from 3.0 to 6.0. This means

that even if a program scored higher than the maximum score (for example, a score of 6.5), this would not result in the program earning any additional points toward the QRIS rating.

Table 3. Environment Rating Scales Scores for Assigning Points

	ECERS-R or ECERS-3	ITERS-R	FCCERS-R
Average Minimum Score Recognized	3.82	3.82	3.82
Range in Minimum Scores	3.0–5.0	3.0–5.0	3.0–5.0
Average Maximum Score Recognized	5.36	5.36	5.36
Range in Maximum Scores	3.0–6.0	3.0–6.0	3.0–6.0

Source: Unpublished data from the Quality Compendium, 2017.

- ◆ Seven QRISs assign points for CLASS Pre-K scores by domain. Table 4 shows the average minimum and maximum scores programs can earn points for, and the ranges in these scores across QRISs. Similar to the pattern noted in Table 2, programs can earn points for higher scores on Emotional Support and Classroom Organization subscales, while lower scores can earn points on the Instructional Support subscale.

Table 4. CLASS Pre-K Scores for Assigning Points, by Domain

	Emotional Support	Classroom Organization	Instructional Support
Average Minimum Score Recognized	4.17	3.85	2.25
Range in Minimum Scores	3.5–5.0	2.6–5.0	2.0–3.0
Average Maximum Score Recognized	5.85	5.43	3.71
Range in Maximum Scores	5.5–6.0	3.6–6.0	3.0–5.0

Source: Unpublished data from the Quality Compendium, 2017.

Notes: Table 4 includes data from 6 QRISs; data were not available for 1 QRIS. Scores on the CLASS tools range from 1–7.

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