

Quality Rating and Improvement System (QRIS) Validation Study Designs

Information Request:

States that have received Race to the Top Early Learning Challenge funding are designing and conducting Quality Rating and Improvement System (QRIS) validation studies. The Early Learning Challenge Technical Assistance liaison to a State informed CEELO that this State is seeking information about the approaches states are taking to the design of their validation studies to inform their approach to validation studies.

State's Goal:

This state has received Race to the Top Early Learning Challenge funds and is seeking information to inform the design of the QRIS validation study.

Response:

States are a variety of approaches to the design of QRIS Validation Studies. According to Resnick (2012), validation of a QRIS is an “ongoing, iterative process that assesses whether design decisions about program quality standards and measurement strategies are producing meaningful and accurate ratings”. QRIS validation studies can determine whether rating components and summary ratings can be relied on as accurate indicators of program quality, and can produce recommendations to improve the system. The validation studies that states have conducted or are currently conducting can be grouped into four different categories:¹

What we Know:

1. Examination of underlying concepts. Indiana, Kentucky and Georgia used the first method for validation, in which they examined the underlying concepts. Indiana conducted a comprehensive review of its indicators of quality, classifying them as having “some,” “moderate,” or “substantial” evidence. They found “substantial” evidence for 75% of the indicators.

Kentucky determined how the standards aligned with existing quality frameworks. Using a crosswalk comparison of standards and frameworks they confirmed some standards and identified possible gaps. Georgia used stakeholder group interviews as well as expert review to identify key indicators of quality.

2. Examination of the psychometric properties of measures used to assess quality. Maine conducted a validation study that used the second method for validation—an examination of the psychometric properties of measures used to assess quality. Using a sample design involving random selection of providers by type and quality level over time (a three-year period), they conducted on-site observations using the ERS instruments, staff and parent questionnaires, and analysis of administrative data (such as QRIS enrollment, state licensing, and technical assistance data). They found that providers at higher levels of quality were more likely to have parents report receiving more support services but that parents’ perceptions of quality did not improve across the quality levels. When staff were asked about staff development, providers at the higher quality level were more likely to report receiving supports and resources for professional development, which partially validated the quality levels. They also found differences in job stress by type of program but not by quality levels.

3. Assessment of outputs of the rating process, typically involves correlating ERS scores with quality levels. For example, this approach tests whether ECERS-R scores in center-based preschool programs are higher for providers at higher QRIS levels.

INFORMATION REQUEST

State's Goal

Background and Context

Response

What We Know

Resources and Links

¹Source: Resnick, G. (2012). Massachusetts Quality Rating and Improvement System (QRIS) Validation Study Research Plan. University of Massachusetts Donahue Institute, Research and Evaluation Group.

Indiana conducted this type of validation study, using a stratified random sample of providers across quality levels and found that the ERS scores were significantly correlated with quality levels. There was also a relatively strong linear effect across the four quality levels.

4. Relation of ratings to expected child outcomes is required under the mandate of the federal Race to the Top grants. This type of validation study involves correlating levels of quality with child outcomes. This type of validation study assumes there is a strong relationship between quality and child outcomes, even though several large-scale national studies have found only modest relationships. Minnesota conducted this type of validation study involving a sample of 700 four-year olds recruited from 138 QRIS-rated programs including center-based and family child care settings. Programs serving low-income children were oversampled. In the fall and spring of the year before Kindergarten, children completed direct assessments of expressive and receptive vocabulary, phonological awareness, print knowledge, and early math skills. Teachers/caregivers completed assessments of children's social-emotional development and approaches to learning. Fall to spring gain scores were calculated and compared across star rating levels and quality categories using multilevel modeling analyses. Researchers conducting this validation study examined four domains of quality: Family Partnerships, Teacher Training and Education, Tracking Learning, and Teaching Materials and Strategies. The study found no significant relationships between children's gains over time and the quality level of the providers or the points earned to determine quality level. This study is one of several that illustrate the difficulty of finding relationships between quality levels and child outcomes. In a similar study in Virginia, researchers found no significant differences in literacy skills at Kindergarten entry by quality level. Nonetheless, this study found that children who had attended higher quality programs demonstrated ore significant growth in literacy skills in the year before Kindergarten compared to children in lower quality programs. Yet, differences in growth were not sustained into Kindergarten.

The Office of Planning, Research and Evaluation at the U.S. Department of Health and Human Services identified several difficulties inherent in conducting child outcome studies as

part of a QRIS validation. These studies are costly and include several limitations. For example, the measures of children who are English Language Learners are limited and attendance and exposure to a program are rarely included because they are difficult to measure. Most validation studies do not account for the nesting of children within programs by using good sample design adjustments in addition to multilevel modeling techniques. And, often these studies do not control for selection factors. Since one purpose of publishing QRIS ratings is to inform parents to improve decision-making, failure to include selection factors is a critical challenge in validation studies. That is, because parents choose child care, theoretically at least in part based on the quality rating, families enrolled with providers at different quality levels are likely not equivalent at the start of the study.

Most states are using a process that incorporates the current research on how children learn and develop, when available, and recognizes professional judgment and consensus among stakeholders intended to use the standards to answer the above questions.



Resources and links:

Lugo-Gil, J., Sattar, S., Ross, C., Boller, K., Tout, K., & Kirby, G. (2011). The Quality Rating and Improvement System (QRIS) evaluation toolkit. OPRE Report #2011-31. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research and Evaluation.

This toolkit includes information on how to plan and design an evaluation of QRISs. In particular, p. 67 – 71 provide details on conducting a validation study.

Web link: http://www.mathematica-mpr.com/publications/pdfs/earlychildhood/qrис_toolkit.pdf

Resnick, G. (2013). Massachusetts Quality Rating and Improvement System (QRIS) Validation Study: Measurement Map. University of Massachusetts Donahue Institute, Research and Evaluation Group.

This document illustrates the alignment between the QRIS measures, the research evidence, and the standards. The document presents the results of the first step of the QRIS validation study.

Web link: <http://webcache.googleusercontent.com/search?q=cache:UF9zSdMtE5kJ:www.eec.state.ma.us/docs1/board-materials/20130124-qrис-validation-study-measurement-map.docx+&cd=1&hl=en&ct=clnk&gl=us>

QRIS Network. The Quality Rating and Improvement System (QRIS) National Learning Network was formed by a coalition of states and organizations. This website provides information and learning opportunities to states that have a QRIS or that are interested in developing one. The site has a variety of resources including links to state contacts and QRIS evaluation documents.

Web link: <http://www.qrisnetwork.org/>

Quality Initiatives Research and Evaluation (INQUIRE) Consortium Workgroup. This group convenes regularly to support high quality, policy-relevant research and evaluation on quality rating and improvement systems (QRIS) and other evaluation initiatives by providing a learning community and resources to support researchers. It is also designed to provide input and information to State administrators and other policymakers and practitioners on evaluation strategies, new research, interpretation of research results, and the implications of research results and new research for practice. The link provides key contacts and a summary of findings.

Web link: <http://opre.blhtech.com/workinggroups/descriptions/inquire.aspx>

INQUIRE hosted a webinar entitled Validating Quality Rating and Improvement Systems on March 15, 2012. The webinar describes QRIS validation and provides examples from six states (Georgia, Indiana, Kentucky, Maine, Minnesota, Virginia). The link below accesses the slide deck from the webinar.

Web link: <http://www.slideshare.net/chrisgreene/qrис-validation-webinar>

Resources and links continued:

Zellman, G. L. & Fiene, R. (2012). Validation of Quality Rating and Improvement Systems for Early Care and Education and School-Age Care, Research-to-Policy, Research-to-Practice Brief OPRE 2012-29. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Web link: <http://qrisnetwork.org/sites/all/files/resources/gscobb/2012-05-28%2007:36/Report.pdf>

Zellman, G.L., Karoly, L.A. (2012). Moving to Outcomes: Approaches to Incorporating Child Assessments into State Early Childhood Quality Rating and Improvement Systems

This research brief describes work done for RAND Education and RAND Labor and documented in Moving to Outcomes: Approaches to Incorporating Child Assessments into State Early Childhood Quality Rating and Improvement Systems by Gail L. Zellman and Lynn A. Karoly, OP-364-PF, 2012, 80 pp.

Web link: http://www.rand.org/pubs/research_briefs/RB9639/index1.html

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¹Administration for Children and Families, Office of Policy, Research and Evaluation. 2012. Validating Quality Rating and Improvement Systems Webinar March 15, 2012.

ⁱⁱIbid, Administration for Children and Families, 2012.