REL Midwest Reference Desk
Quality Rating Improvement Systems and Improved Student Outcomes

March 2015

Question

1. **What does existing research say about which aspects of a quality rating improvement system (QRIS) are most aligned with improved student outcomes?**

Background

REL Midwest received a request for information on the impact of quality rating improvement systems on student outcomes.

Following an established REL Midwest research protocol, we conducted a search for research reports as well as descriptive and policy-oriented briefs and articles on quality rating improvement systems and student outcomes. The sources included federally funded organizations, additional research institutions, several educational research databases, and a general Internet search using Google.

We also searched for appropriate organizations that may act as resources on this issue. We have not done an evaluation of these organizations or the resources themselves but offer this list for your information only.

1. **What does existing research say about which aspects of a quality rating improvement system (QRIS) are most aligned with improved student outcomes?**

Elicker, J., Langill, C., Ruprecht, K., Lewsader, J., & Anderson, T. (2011). *Evaluation of "Paths to QUALITY," Indiana's child care quality rating and improvement system: Final report*. West Lafayette, IN: Purdue University, Department of Human Development & Family Studies, Center for Families. Retrieved from http://www.cfs.purdue.edu/cff/documents/project_reports/PTQFinalReportRev11012.pdf

> *From the report:* "This evaluation study, with data collection completed between July 2008 and September 2011 included all eleven Child Care Resource and Referral Service Delivery Areas (SDAs) in Indiana. The overall goals of the evaluation research were to validate the quality rating system and describe the experiences of child care providers, parents, and children, with this new program, as it was implemented."

Isner, T., Tout, K., Zaslow, M., Soli, M., Quinn, K., Rothenburg, L., & Burkhauser, M. (2011). *Coaching in early care and education programs and quality rating and improvement systems (QRIS): Identifying promising features*. Washington, DC: Child Trends. Retrieved from http://www.childtrends.org/Files//Child_Trends-2011_04_27_FR_CoachingEarlyCare.pdf

From the summary: "Coaching and other on-site, individualized professional development strategies (consultation, mentoring, and technical assistance) are promising approaches to support the application of new teaching practices and overall quality improvement among practitioners in early care and education settings. This Research Brief summarizes a recent report synthesizing findings from a literature review and a multi-case study of coaching in Quality Rating and Improvement Systems (QRIS) to understand more about the practice of coaching and whether features of coaching can be identified that are linked to positive outcomes for practitioners and children. This brief concludes with an overview of implications for QRIS policy and practice."

Muenchow, S., Holod, A., Quick, H. E., Hawkinson, L. E., González, R. L., Abram, K., . . . Mattox, T. (2013*). Local quality improvement efforts and outcomes descriptive study: Final report*. San Mateo, CA: American Institutes for Research & Santa Monica, CA: RAND Corporation. Retrieved from http://www.cde.ca.gov/sp/cd/ce/documents/localqieffortfinalreport.pdf

From the executive summary: "The purpose of this study, conducted by American Institutes for Research (AIR) and the RAND Corporation, is to support the state of California and its counties in their efforts to build robust, evidence-based quality improvement systems. Specifically, the study: summarizes information on QRISs in other states, including validation and impact studies of these systems; describes the characteristics and strengths of pre-existing local initiatives in California; reviews the planning and early implementation of the local QRISs supported by the RTT-ELC grant; compares the elements of the pre-existing local systems with those proposed by the California Early Learning Quality Improvement System (CAEL QIS) Advisory Committee in 2010 and by the RTT-ELC Consortia in late 2012; synthesizes information from existing evaluations of local quality improvement (QI) initiatives; describes the characteristics of providers participating in local quality improvement systems (QISs) and QRISs and the children and families served by them, using data from select local systems; identifies promising practices for program improvement and professional development (drawing on literature from other states as well as from California); describes the dissemination of quality information to parents and describes how families use information to guide their early learning and care choices; provides recommendations for refining the RTT-ELC Regional Leadership Consortia Quality Continuum Framework; and offers suggestions for the implementation of local QRISs, for system monitoring and improvement, and for a state role in supporting these efforts."

Schwartz, H., Karoly, L., Le, V., Tamargo, J., & Setodji, C. (2014). *Evaluation of Delaware Stars for Early Success: Year 1 report.* Santa Monica, CA: RAND Corporation. Retrieved from http://www.rand.org/content/dam/rand/pubs/research_reports/RR600/RR606/RAND_RR606.pdf

> *From the abstract:* "Delaware was in the first group of states to receive a federal grant in 2012 to improve early care and education services and increase the number of infants, toddlers, and preschool-age children in high-quality programs. One component of the state's grant is a rigorous validation process for Delaware Stars for Early Success, a voluntary quality rating and improvement system (QRIS), including a study to assess the relationship between the quality ratings and the developmental outcomes of children. To support Delaware's efforts to ensure that the QRIS is working as intended, RAND researchers examined prior validation research, analyzed Delaware Stars administrative data, conducted a series of key stakeholder interviews and focus groups, and implemented a virtual pilot test of Delaware Stars using national data to identify relationships between program quality and child developmental outcomes. The results provide a baseline understanding of the types of child care providers that participate in Delaware Stars, their Delaware Stars quality ratings, how quickly they progress to higher quality levels and which standards they are meeting, how enrolled children are distributed across participating and nonparticipating programs, and the experiences of administrators, providers, and families with the current system. Although this initial study was not intended to provide definitive recommendations for improving Delaware Stars, the findings point to ways to reinforce initiatives already under way in Delaware Stars or that could be considered for the future."

Tout, K., Starr, R., Isner, T., Cleveland, J., Albertson-Junkans, L., Soli, M., & Quinn, K. (2011). *Evaluation of Parent Aware: Minnesota's quality rating and improvement system pilot. Final evaluation report.* Minneapolis, MN: Child Trends. Retrieved from https://s3.amazonaws.com/Omnera/VerV/s3finder/38/pdf/Parent_Aware_Year_4_Final_Evaluation_Technical_Report_Dec_2011.pdf

> *From the overview:* "This report is the fourth to be produced from the evaluation of Parent Aware being conducted by Child Trends and funded by the Minnesota Early Learning Foundation (MELF). It covers the final year of the pilot from July, 2010 through September, 2011. The report describes patterns of program enrollment and ratings. It also provides an in-depth analysis of changes in quality among Parent Aware rated programs, provision and use of quality improvement services, parents' perceptions of quality and knowledge of Parent Aware, and the school readiness of children participating in Parent Aware-rated programs."

Tout, K., Starr, R., Isner, T., Cleveland, J., Albertson-Junkans, L., Soli, M., & Quinn, K. (2011). *Evaluation of Parent Aware: Minnesota's quality rating and improvement system pilot. Final report summary.* Minneapolis, MN: Child Trends. Retrieved from https://s3.amazonaws.com/Omnera/VerV/s3finder/38/pdf/Parent_Aware_Year_4_Final_Full_summary_report_Dec_2011.pdf

From the overview: "In 2007, the Minnesota Early Learning Foundation contracted with Child Trends to conduct an evaluation of the Parent Aware pilot. The goal of the evaluation was to address a set of comprehensive questions about implementation of Parent Aware and initial outcomes of the pilot. The issues that have been analyzed by the Evaluation include: stakeholder perceptions of the potential of Parent Aware to achieve its stated goals; patterns of enrollment by program type; density of program participation; distribution of programs across rating levels; trends in re-rating of programs; validation of the Parent Aware Rating Tool including an examination of linkages between Parent Aware quality measures and children's developmental outcomes; parents' perceptions of quality early care and education; parents' awareness of Parent Aware; programs' experiences in Parent Aware; and provision and outcomes of quality improvement supports. Outcomes are examined at multiple levels including the early childhood system, early childhood programs, practitioners, families and children."

Zellman, G. L., Perlman, M., Le, V., & Setodji, C. (2008). *Assessing the validity of the Qualistar Early Learning quality rating and improvement system as a tool for improving child-care quality*. Santa Monica, CA: RAND Corporation. Retrieved from http://www.rand.org/content/dam/rand/pubs/monographs/2008/RAND_MG650.pdf

From the summary: "Qualistar Early Learning, a Colorado-based nonprofit organization, was one of the first to create a QRIS. Qualistar approached RAND in 2000, asking for help in evaluating the validity of the Qualistar QRIS. RAND assessed the five Qualistar QRIS components separately, then examined how they related to each other; compared Qualistar QRIS measures to other, established measures of quality; and examined whether quality improvements as measured by the Qualistar QRIS components were associated with better child outcomes. This report describes the results of our work, conducted from 2000 to 2007. It should be of interest to early childhood educators and policymakers concerned with improving childcare quality and to researchers working to develop better measures of care quality."

Additional Resources

- Jeon, L., Buettner, C. K., & Hur, E. (2014). Examing pre-school classroom quality in a statewide quality rating and improvement system. *Child & Youth Care Forum, 43*(4), 469–487. Retrieved from http://link.springer.com/article/10.1007%2Fs10566-014-9248-z

  From the abstract: "Background: Research has documented the importance of high-quality early childhood experiences in preparing children for school. Quality rating and improvement systems (QRIS) have recently emerged in many states as a way to build quality of child care and to promote better child outcomes. Objective: The goal of this study was to determine if preschool classrooms representing various levels of QRIS structure and status differ on classroom process quality as assessed by several observational tools (i.e., the Early Childhood Environmental Rating Scale-Revised, the Classroom Assessment Scoring System, and the Early Language and Literacy Observation Tool). Methods: We randomly selected 103 teachers in 96 classrooms from 48 full-time child-care programs, and compared classroom quality in QRIS participating programs with classrooms in non-participating programs, and classroom quality across

QRIS rating levels. Results: From multilevel analyses, we found that teachers in QRIS participating programs scored higher on global quality of classrooms, emotional support, instructional support, and literacy environment than those who were in non-participating programs after controlling for center-level and classroom-level variables. Teachers in the highest rated QRIS programs exhibited better process quality, including emotional support, classroom organization, instructional support, literacy environment, general classroom environments, and language curriculum than those in lower level programs. Conclusions: This study suggests that QRIS may be a promising investment for quality in early childhood education and care, which is a reasonable proxy for improving children's school readiness."

Note: REL Midwest tries to provide publically available resources whenever possible. Although we were unable to locate a link to the full-text version of this article, we determined that it might be of interest to you. The resource may be available through university or public library systems.

- Karoly, L. A. (2014). *Validation studies for early learning and care quality rating and improvement systems: A review of the literature.* Working Paper. Santa Monica, CA: RAND Corporation. Retrieved from http://www.rand.org/content/dam/rand/pubs/working_papers/WR1000/WR1051/RAND_WR1051.pdf

  From the abstract: "The aim of this paper is to review the set of studies that seek to validate QRIS rating systems in one of several ways: by examining the relationship between program ratings and objective measures of program quality; by determining if program ratings increase over time; and by estimating the relationship between program ratings and child developmental outcomes. Specifically, we review 14 such validation studies that address one or more of these three questions. Together, these 14 studies cover 12 QRISs in 11 states or substate areas: Colorado, Florida (two counties), Indiana, Maine, Minnesota, Missouri, North Carolina, Oklahoma, Pennsylvania, Tennessee, and Virginia. In reviewing the literature, we are interested in the methods and measures they employ, as well as the empirical results."

- 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. Retrieved from http://www.qrisnetwork.org/sites/all/files/resources/gscobb/2012-05-28%2007:36/Report.pdf"

  From the summary: "To date, QRIS validation efforts have been limited. One reason may be that validation is a complex endeavor that involves a range of activities. In addition, there has been little guidance available that clarifies the purpose of QRIS validation or identifies the activities that comprise validation. At the same time, there is growing pressure to validate these systems as stakeholders seek evidence that QRIS are functioning as intended. The federal government has elevated QRIS validation by

including it as a central component of the 2011 Race to the Top Early Learning Challenge and requiring state applicants to develop QRIS validation plans as part of their submissions.

The purpose of this Brief is to help QRIS stakeholders better understand validation and to outline a set of complementary validation activities. The Brief defines validation, describes different types of validation studies, and provides guidance on developing a validation plan, including tools to determine the appropriate scope and timing of validation activities. It also lists references and resources for those who wish to learn more. This Brief is aimed at readers in positions to authorize, finance, design, and refine QRISs and other quality improvement efforts, including state child care administrators, early education policy and program specialists, legislators, and other potential funders."

- Zellman, G. L., & Karoly, L. A., (2012). Moving to outcomes: Approaches to incorporating child assessments into state early childhood quality rating and improvement systems. Santa Monica, CA: RAND Corporation. Retrieved from http://www.rand.org/content/dam/rand/pubs/occasional_papers/2012/RAND_OP364.pdf

  From the summary: "In this summary, we briefly review the motivation for QRISs and highlight some of the key challenges encountered in assessing young children and using assessment data. We then present five approaches for incorporating child assessments into state ECE quality improvement (QI) efforts. The approaches differ in terms of purpose, who conducts the assessment, and the sort of design needed to ensure that the resulting child assessment data can be used in a meaningful way. We conclude by offering guidance regarding the use of the five strategies based on our assessment of the overall strengths and weaknesses and the potential benefit relative to the cost of each approach."

Additional Organizations to Consult

- Child Trends
  http://www.childtrends.org/

  From the website: "Child Trends is a nonprofit, nonpartisan research center that provides valuable information and insights on the well-being of children and youth. For more than 35 years, policymakers, funders, educators and service providers in the U.S. and around the world have relied on our data and analyses to improve policies and programs serving children and youth. Our team of experts brings together a range of educational, work, policy and cultural experiences to provide cutting-edge research on issues affecting children from birth to early adulthood. Our work is supported by foundations; federal, state and local government agencies; and by nonprofit organizations."

- INQUIRE
  http://inquiredatatoolkit.org/

  From the website: "The Quality Initiatives Research and Evaluation Consortium (INQUIRE), funded by the Office of Planning, Research and Evaluation (OPRE) in the

Administration for Children and Families, is a community of researchers working to identify issues and exchange resources related to the research and evaluation of Quality Rating and Improvement Systems (QRIS) and other quality initiatives. INQUIRE researchers participate in one or more working groups tasked with developing resources on topics related to QRIS such as validation of quality standards and ratings, the use of observational quality measures in QRIS, and quality improvement.

The INQUIRE Data Work Group was convened to address a request from QRIS stakeholders for information on building an effective data infrastructure to support QRIS data-related activities including monitoring, continuous program improvement, reporting, validation, and evaluation. The INQUIRE Data Toolkit was designed to provide tools to support effective data collection and the use of data to answer important policy and reporting questions through the use of common data elements."

- QRIS Compendium
  http://qriscompendium.org/

  From the website: "The QRIS Compendium and qriscompendium.org is a comprehensive resource for administrators, policy makers, researchers, technical assistance providers and others for information about all of the QRIS operating in the US and its territories. Features of the 2014 QRIS Compendium include: information on topics like rating, use of observational tools, and indicators; full state and locality QRIS profiles; functionality to create customizable data reports about specific QRIS data elements; and useful analysis of some of the key facts about QRIS in 2014."

- QRIS National Learning Network
  http://www.qrisnetwork.org/

  From the website: "The Quality Rating and Improvement System (QRIS) National Learning Network was formed by a coalition of states and organizations. Network members are united in the desire to use rating and improvement strategies to elevate the quality of care in state early care and education systems and to support and improve children's development. We provide information, learning opportunities and direct technical assistance to states that have a QRIS or that are interested in developing one."

Keywords and Search Strings Used in the Search

- Quality Ratings Systems OR Quality Ratings and Improvement Systems OR QRIS AND Outcomes OR Validation

- Quality Ratings AND Components AND Outcomes

Search of Databases and Websites

Institute of Education Sciences sources: Regional Educational Laboratory (REL) Program, National Center for Education Statistics (NCES), Institute of Education Sciences (IES)

Additional data resources: ERIC, EBSCO databases, Google Scholar, Google, general Internet search

Criteria for Inclusion

When Reference Desk researchers review resources, they consider—among other things—four factors:

- *Date of the publication:* The most current information is included, except in the case of nationally known seminal resources.

- *Source and funder of the report/study/brief/article:* Priority is given to IES, nationally funded, and certain other vetted sources known for strict attention to research protocols.

- *Methodology:* Randomized controlled trial studies, surveys, self-assessments, literature reviews, policy briefs. Priority for inclusion generally is given to randomized controlled trial study findings, but the reader should note at least the following factors when basing decisions on these resources: numbers of participants (just a few? thousands?); selection (Did the participants volunteer for the study, or were they chosen?); representation (Were findings generalized from a homogeneous or a diverse pool of participants? Was the study sample representative of the population as a whole?).

- *Existing knowledge base:* Although we strive to include vetted resources, there are times when the research base is slim or nonexistent. In these cases, we have included the best resources we could find, which may include newspaper articles, interviews with content specialists, organization websites, and so on.