Methods and Measures for Understanding Children's Experiences in Parent Aware Rated Programs

Findings From an Evaluation of Parent Aware, Minnesota's QRIS

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Introduction

In March 2022, Child Trends contracted with the Minnesota Department of Children, Youth, and Families (DCYF)[1] to evaluate Parent Aware, Minnesota's quality rating and improvement system (QRIS) for early care and education (ECE) programs.[2] The evaluation included several research activities designed to assess to degree to which Parent Aware effectively supports the state's children, families, and the ECE workforce.

In this brief, we provide the background and context for the Parent Aware evaluation and our guiding questions for the evaluation. Then, we discuss our reflections on the methods and measures we used to understand ECE quality and children's experiences in Parent Aware Rated programs—particularly in the wake of the COVID-19 pandemic and the significant impacts it had on the ECE sector.[3,i] This brief can inform approaches for ECE researchers and state QRIS leaders to measure and understand how quality in ECE programs and myriad other factors come together to shape children's healthy learning and development.

Parent Aware is Minnesota's quality rating and improvement system (QRIS). Parent Aware assigns participating early care and education (ECE) programs a One- to Four-Star Rating based on the extent to which programs meet quality indicators within five categories of program standards: 1) Health and Well-being, 2) Relationships with Families, 3) Teaching and Relationships with Children, 4) Assessments and Planning for Each Individual Child, and 5) Professionalism. Parent Aware offers ECE providers access to quality improvement coaches, professional development advisors, and mental health consultants, and provides resources to help families find high-quality care that meets their needs. The Minnesota Department of Human Services is currently working on the Parent Aware Redesign, with a goal of addressing inequities within Parent Aware.

[1] This report was funded by the Minnesota Department of Children, Youth, and Families, which launched on July 1, 2024. From July 2024 to July 2025, state programs and staff will gradually transfer to DCYF from the Departments of Human Services, Education, Health, and Public Safety. As this new agency is established, documents may have previous agency logos or names and the DCYF website may temporarily redirect to original agency web pages. For more details, visit the DCYF website.

[2] Parent Aware is available for family child care and center-based programs that are licensed through Minnesota DCYF, certified child care programs, Head Start programs, and public school-based and Voluntary Pre-K programs.

[3] With the effects of the pandemic on ECE programs' staffing and capacity, we experienced challenges recruiting study participants. As a result, our sample size did not permit examination of associations between Ratings, quality, and children's development over time. We still pursued the study to explore methods and measures that could take a more holistic approach to understanding the experiences of children, families, and the workforce in Parent Aware Rated programs without placing undue burden on the individuals asked to participate in research.

Background and Context

Impacts of the COVID-19 pandemic on the ECE system

The COVID-19 pandemic had substantial negative impacts on the ECE system (e.g., exacerbating staffing shortages and fiscal instability)[ii, iii, iv] and on children and families through increased financial insecurity, stress, and health concerns.[v, vi, vii, viii] During the pandemic, ECE researchers developed new or revised research methods and measures to reduce the burden on research participants and acknowledge the pandemic's broader context that shaped the lives of the workforce, families, and children.[ix] Researchers across multiple projects, including the Parent Aware evaluation, also recognized that the small number of ECE programs with the time and capacity to participate in research during the pandemic[4] likely reflected a selected group with characteristics that may differ from other programs. Therefore, it was critical to identify a data collection framework and strategies that could be implemented during the pandemic while also being aware of the limitations of the methods and sample for drawing conclusions about the effectiveness of Parent Aware.

Rethinking conceptualizations of ECE quality

Prior approaches to evaluating QRIS and ECE quality (i.e., validation studies[5]) attempted to quantify the associations between ratings and children's developmental outcomes across a large number of programs. Across multiple validation studies conducted in states with different measurement and rating structures, quality ratings have not been consistently or strongly related to children's developmental progress.[6] A synthesis of findings across 10 states concluded that quality ratings are generally not precise enough to capture the range of children's experiences at home and in their ECE settings, or to be associated with differences in their growth over time.[x] The authors recommended a greater focus on learning to support changes in program quality over time and investment in developing measures that better capture a greater range of children's experiences in ECE. More recent guidance from ECE measurement experts suggests the need to more holistically understand and promote program quality by including and assessing the policies and practices that support equitable access and participation for all children in ECE programs.[xi, xii]

Our approach for the Parent Aware evaluation

Drawing on this guidance from ECE measurement experts, our team developed a revised approach to conducting certain activities within the Parent Aware evaluation that reflects a holistic strategy to understand children's experiences in ECE programs. Our evaluation approach also aligns with the background research and rationale for the Minnesota Successful Learner Equation, which recognizes "the individuals, programs, and systems that contribute to the success of each learner. Adults, programs, and systems are responsible for supporting each child." Four interconnected components contribute to successful learners: ready families, ready communities, ready schools and programs, and a ready state with ready systems.[xiii] Through the Successful Learner Equation, Minnesota recognizes that children's development is not solely a product of children's experiences in ECE programs or relationships with teachers, but rather is

[4] The Parent Aware evaluation required programs to interact with visitors to set up video cameras for observations and to help distribute surveys to families.
[5] Validation studies evaluate how well quality measurement processes (i.e., ratings and quality standards) capture meaningful differences in ECE program quality and the extent to which children's developmental progress is associated with those quality differences.
[6] Validation studies typically assessed children's developmental outcomes in the fall and spring in the year before they start kindergarten.

influenced by a range of factors. Promoting optimal child development includes supporting individual children as well as their families, communities, schools, and the state in which they live.

Overall, we developed our research questions to describe families' and children's experiences in ECE programs and to explore quality and children's development in Rated programs. We used novel methods and measures to help answer our research questions, including teacher and parent reports of children's development, a survey of providers, video-recorded classroom observations, and the Assessing Classroom Sociocultural Equity Scale (ACSES). Ultimately, our goal was to provide actionable data that can inform the Parent Aware Redesign and new conceptualizations of the features of quality that support children in the years before they enter kindergarten.

Guiding questions for this evaluation

We crafted our guiding research questions to address two goals, keeping in mind the impact of the pandemic. The questions are detailed below, associated with the overall goal they aim to address.

1. **Understanding children's experiences and the quality of care in Rated programs.** Specific questions included:
    - What is the observed quality of Parent Aware Rated programs?
    - Are there any trends in the aspects of observed quality that differ across program types, Star Rating levels, or other program-level characteristics?
    - What other elements of quality in ECE programs—such as providers' professional experiences, interests, attitudes, or beliefs—might be difficult to observe but still important for children's experiences in care?
2. **Understanding children's learning and development in Rated programs.** Specific questions included:
    - How are preschool-age children receiving care in Rated ECE programs learning and developing over time?
    - What trends are ECE providers and families noticing in children's learning and development, and what supports do they need to address any concerns?

To explore these questions, our team recruited ECE programs—along with families of 3- and 4-year-old children enrolled in Parent Aware Rated programs—to participate in several activities during the 2022-2023 school year. Our final sample included 37 ECE programs: 20 child care centers, 13 family child care programs, and 4 public school Pre-K programs. Just over half of the programs in our study (57%) were located in areas outside the seven-county Twin Cities Metropolitan Area, and the rest were located within the Twin Cities Metropolitan Area (43%).[7]

In ECE programs, research activities for participating providers[8] included an on-site, video-recorded observation and an online survey about their program, professional experiences, and perceptions of Parent Aware. Both families and providers completed surveys about enrolled 3- and 4-year-old children's learning and development twice during the school year (Fall 2022 and Spring 2023).

[7] For the purposes of our research, we use the Minnesota state government's designation of the Twin Cities Metropolitan Area, which includes seven counties in Minnesota: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington. Please note this is distinct from the U.S. Office of Management and Budget's designation of a (larger) metropolitan statistical area anchored by the cities of Minneapolis and St. Paul.

[8] We use the term "providers" to describe the ECE professionals who participated in the study. This includes family child care providers and, in center-based programs, the lead teacher in a randomly selected preschool classroom. In two centers, the program director completed the provider survey.

Reflections on Methods and Measures

To more holistically understand children's experiences in Parent Aware Rated programs while being mindful to avoid burdening the individuals asked to participate in the study, our team focused our efforts on exploring the feasibility and value of using novel methods and measures for evaluating state QRIS. These novel methods and measures included provider and family reports of children's development, a survey of providers, video-recorded classroom observations, and piloting of the Assessing Classroom Sociocultural Equity Scale (ACSES).

Measuring children's development through teacher and parent reports

To more holistically understand children's experiences in the wake of the pandemic, it was important to understand how children were faring according to perceptions of their development from their teachers/providers and families. Our approach was to collect provider and family reports of children's development using a pilot version of a tool called the Healthy and Ready to Learn (HRTL), which is used in the National Survey of Children's Health.[9] The HRTL describes the skills of children ages 3 to 5 across four developmental domains: early learning skills, self-regulation, social-emotional development, and physical well-being and motor development.[xiv] We asked teachers/providers and families to complete this survey in both the fall and spring.

The HRTL revealed differences in how families and providers perceived children's school readiness and social-emotional skills, especially during the fall data collection. By the spring, families' and providers' responses were more aligned. In the fall, providers may have been less familiar with the children and needed more time to get to know them and their skills, or children may have been getting used to a new and unfamiliar environment and in need of more time to "settle in." Alternatively, providers generally have more experience assessing and comparing the developmental skills and needs of multiple young children, so they may have used different standards than families for how they ranked children's skills. It is notable that, across both the fall and spring data collection, only a small proportion of families and providers perceived that children were in need of support because they were not yet demonstrating skills in any single developmental domain. Regardless of the reason for this variation, these trends highlight the limitations of using one measure at a single point in time to assess children's learning and development or the quality of their ECE program.

The HRTL may be a useful way for families and ECE providers to identify children's strengths and needs without a lengthy or in-person direct assessment, but the measure is not sensitive enough to capture changes from fall to spring. The HRTL is relatively quick to complete (around 5 minutes per child), so it was minimally burdensome on families and providers. The tool is also free and can be used without training, making it accessible to both providers and families. While we intended to use the HRTL to detect changes in children's development from fall to spring, we found that it was not sensitive enough to capture changes over such a short timeframe. However, the HRTL could have value if conducted in the spring across a population of children in Minnesota to understand children's strengths and needs and tailor supports across the population. Children's skills in the four developmental domains captured through the HRTL are formed through experiences in a variety of interconnected contexts, of which ECE is only one part. Using the HRTL to identify needed supports at the population level—rather than as a metric for determining the quality of

[9] A finalized version of the HRTL tool was released in 2024. We used a pilot version because it was the tool available at the time of the data collection.

ECE programs—also aligns with the Minnesota Successful Learner equation in that it does not place the onus of children's learning and development solely on their ECE providers.

Surveying providers on their experiences in the wake of the pandemic

We surveyed ECE providers to learn about areas of their program and practice where they wanted more support and their overall experiences with Parent Aware. Previous evaluations of Parent Aware included the perspectives of providers as valuable input to inform the Redesign and other revisions to the quality improvement process.

Findings from the provider survey highlight the importance of collecting information about providers' experiences, needs, and ideas as part of QRIS evaluation studies. Providers were most interested in support and professional development related to managing and supporting children's behavior; working with families; nurturing children's social and emotional development; planning learning activities that meet all children's needs; and working with children whose racial, ethnic, or cultural backgrounds differ from theirs. However, they also shared that they lack sufficient time or capacity to access this support. Asking providers what kinds of supports they need and what barriers they face can inform a more robust understanding of how Parent Aware and other state QRIS are functioning and inform future improvements.

Additionally, about two thirds of providers agreed that Parent Aware Ratings accurately reflect quality, that Parent Aware is beneficial to families, and that Ratings are an important factor for families in finding child care. Compared to findings from a 2019 survey,[xv] a smaller percentage of Rated providers in the most recent survey agreed that their Rating accurately reflects quality. Understanding these changes over time and hearing providers' experiences and feedback can support the development of new strategies to better meet providers' needs.

Using video-recorded classroom observations

We coded video-recorded observations using two tools—the Classroom Assessment Scoring System (CLASS®) (for center-based classrooms and family child care programs) and the Assessing Classroom Sociocultural Equity Scale (ACSES) (for center-based classrooms)—to understand children's experiences in ECE programs. CLASS® measures teaching quality by observing and scoring teachers' interactions with children,[10] while ACSES is a "measure of equitable sociocultural interactions in early childhood … classroom environments."[xvi]

Observations to measure quality in classrooms and family child care homes are traditionally conducted in person. To reduce the health risks of having extra adults in the classroom during the pandemic, we conducted observations using videos recorded with a motion-controlled recording device that tracks the child care provider and connects with a tablet or phone to record the video. Field staff from Child Trends used the recording device to record an 80- 120-minute video in each participating program. Then, staff coded the videos using CLASS® and ACSES.

Video-recorded classroom observations have both advantages and disadvantages. Although we originally hoped that field staff would be able to leave programs after setting up the video recording device, they ended up having to stay to monitor the technology. In future studies, researchers collecting video-recorded observation may consider having providers, rather than field staff, start and stop the video recordings. This could reduce the stress or health risks of having an additional adult in the classroom;

[10] Visit the CLASS website for more information about the CLASS Scoring System: https://teachstone.com/CLASS/

however, a field researcher may still be needed to set up the equipment and collect it upon completion, and providers' responsibility for recording the videos may be burdensome. Similarly, while our team thought that video-recorded observations might be less stressful for some providers since no one would be in the classroom taking notes or scoring the observation, a couple of programs did not feel comfortable with a video recording and declined to participate. Our team also took longer to become reliable on the classroom observation tool when using videos and virtual training than is typical for in-person training.

Participating programs' CLASS® scores were slightly lower on average than a prior evaluation that used in-person observations. This discrepancy could be due to a number of reasons, including our small sample size, use of video-recorded observations, and various other factors related to the context of the pandemic, including staffing challenges, staff turnover, or the temporary pause on CLASS coaching available to Rated programs seeking a Three- or Four-Star Rating. Still, if classroom observations remain commonly conducted in person, there may challenges with comparing scores across in-person and video-recorded classroom observations.

If Minnesota considers incorporating video-recorded observations in Parent Aware Rated programs, either as part of the Rating process or primarily for continuous quality improvement, it may be valuable to connect with staff in other states that have successfully implemented the practice to discuss their methods for collecting videos, challenges, and lessons learned. Washington state, for example, developed an observation tool called the Quick Tool that is scored using videos of classrooms recorded by teachers on a personal device.[xvii]

Measuring equitable practices in ECE settings

Research has shown that children of color can be treated inequitably in the classroom (e.g., teachers can hold stereotypes about children of color or view their behavior more negatively than the behavior of White students).[xviii] Although observation tools such as CLASS® are commonly used in the field for ECE settings, these tools do not account for equitable teacher-child interactions and consider the average experiences of children in the classroom rather than the experiences of individual children. For example, CLASS® does not consider a teacher's equitable or culturally responsive practices.[xix]

Informed by the Parent Aware Racial Equity Action Plan, which includes action steps for embedding racial equity into workforce preparation and professional development, we piloted the Assessing Classroom Sociocultural Equity Scale (ACSES, pronounced "access")—an emerging tool still being validated for use in some ECE contexts.[11] Our goal in piloting the ACSES tool as part of the study was to help expand our understanding of high-quality teacher-child interactions for children of color and to inform DCYF' decisions about the Parent Aware Redesign. Minnesota DCYF was interested in exploring how it could capture equitable and culturally responsive practices in ECE settings. Data collection for the evaluation provided an opportunity to pilot the tool and learn more about how it could work if used on a larger scale in Minnesota.

ACSES provides valuable information on the experiences of children of color in ECE programs.
Ultimately, we found that classrooms in our sample had scores on the lower end of the ACSES scoring scale. Because ACSES is intended to be used as a professional development tool to increase providers' competency in equitable sociocultural interactions, the tool may be valuable to use as a way to provide ECE providers with baseline scores to inform targeted quality improvement goals and serve as a basis for measuring future growth. For example, Think Small (an organization that provides quality improvement supports and professional development to providers in the Twin Cities Metropolitan Area) used ACSES as a "measure to raise awareness about racial equity in the classroom and support educators in teaching all children to learn and thrive." Think Small conducted early childhood coaching based on the ACSES tool:

[11] At the time of this study, ACSES was validated for use in center-based classrooms. Efforts to validate the tool for use in family child care programs are currently underway.

Coaches were trained to be ACSES equity mentors who then worked with teachers to review ACSES scores and identify goals to enhance racial equity in their teaching practices. Think Small also provided virtual professional learning sessions to teachers.[xx]

We also examined the degree to which ACSES and CLASS® scores were correlated. Consistent with previous research,[xxi] we found significant correlations between some ACSES and CLASS® dimensions; for example, the CLASS® dimension Concept Development was positively correlated with ACSES dimension Personalized Learning Opportunities. In line with prior research, we also found instances of divergent validity (i.e., dissimilarities) between ACSES and CLASS® scores, meaning some dimensions of CLASS® and ACSES scores were not correlated.[xxii] This suggests that ACSES may be able to uniquely identify equity-informed and culturally relevant approaches to teaching that are not captured in the CLASS®.

Conclusion

As Minnesota redesigns Parent Aware to address inequities within the system, the state—and ECE researchers more broadly—should also reconsider how to best approach evaluations of Parent Aware and other QRIS. ECE researchers have recommended that QRIS evaluators use measures to better capture a greater range of children's experiences in ECE, and strive to more holistically understand and promote program quality by identifying the policies and practices that support equitable access and participation for all children in ECE programs.[xxiii, xxiv, xxv]

Given this context—and alongside Minnesota's recent adoption of the Successful Learner Equation—future evaluations of QRIS will be most beneficial if they take a holistic view to understanding how well Parent Aware is working. Rather than considering only how well Ratings are measuring quality or predicting children's developmental outcomes, evaluators can seek to understand how Parent Aware is supporting the needs of the state's children, families, and ECE workforce.

In light of the lingering effects of the pandemic on the ECE sector, our team revised its approach to conducting this aspect of the Parent Aware evaluation to reduce burden on participating providers and families while still offering valuable information to inform the Parent Aware Redesign. In particular, the findings outlined in this brief offer insights about new measures and approaches to understand children's experiences and development. From these insights, Minnesota DCYF can consider revising Parent Aware in a way that is responsive to the needs and concerns of providers and families. Additionally, Minnesota DCYF can consider how to collaborate with providers and other key stakeholders to improve the system—not only to promote buy-in for Parent Aware and any revisions, but also to ensure that changes reflect the needs and priorities of the people the system is designed to serve.

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References

[i] Child Care Aware of America (2022). Demanding change: Repairing our child care system. https://www.childcareaware.org/demanding-change-repairing-our-child-care-system/

[ii] National Association for the Education of Young Children. (2020). *Holding on until help comes.* https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/our-work/public-policy-advocacy/holding_on_until_help_comes.survey_analysis_july_2020.pdf

[iii] Shaw, S., Franchett, A., LaForett, D., Maxwell, K., & Bultinck, E. (2023). *Head Start's response to the COVID-19 pandemic.* OPRE Report #2023-025. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. https://www.acf.hhs.gov/opre/report/head-starts-response-covid-19-pandemic

[iv] Tout, K. (2021). *Child care and COVID-19: Support children by investing in early educators and program sustainability.* Society for Research in Child Development. https://www.srcd.org/research/child-care-and-covid-19-support-children-investing-early-educators-and-program

[v] Lin, Y. & McDoniel, M. (2023). *Understanding child care and early education program closures and enrollment during the first year of the COVID-19 pandemic.* OPRE Report #2023-237. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. https://www.acf.hhs.gov/opre/report/understanding-child-care-and-early-education-program-closures-and-enrollment-during

[vi] Patrick, S. W., Henkhaus, L. E., Zickafoose, J. S., Lovell, K., Halvorson, A., Loch, S., Letterie, M., & Davis, M. M. (2020). Well-being of parents and children during the COVID-19 pandemic: A national survey. *Pediatrics, 146*(4). http://doi.org/10.1542/peds.2020-016824

[vii] Shaw, S., Franchett, A., LaForett, D., Maxwell, K., & Bultinck, E. (2023). *Head Start's response to the COVID-19 pandemic.* OPRE Report #2023-025. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. https://www.acf.hhs.gov/opre/report/head-starts-response-covid-19-pandemic

[viii] Tout, K. (2021). *Child care and COVID-19: Support children by investing in early educators and program sustainability.* Society for Research in Child Development. https://www.srcd.org/research/child-care-and-covid-19-support-children-investing-early-educators-and-program

[ix] Diamond, Z., Bell, D., Bernstein, S., Cavadel, E., DeMeo Cook, K., Ehrlich Loewe, S., Gillis, M., Heinz, H., Kelly, A., Kirby, G., Maier, M., Sandstrom, H., & Tout, K. (forthcoming). *Child care and early education research during the COVID-19 pandemic: Lessons learned and future considerations.* OPRE Report #2024-XXX. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

[x] Tout, K., Magnuson, K. Lipscomb, S., Karoly, L, Starr, R., Quick H., Early, D., Epstein, D., Joseph, G., Maxwell, K., Roberts, J., Swanson, C., & Wenner, J. (2017). *Validation of the quality ratings used in Quality Rating and Improvement Systems (QRIS): A synthesis of state studies.* OPRE Report #2017-92. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. https://www.acf.hhs.gov/opre/report/validation-quality-ratings-used-quality-rating-and-improvement-systems-qris-synthesis

[xi] Brooks, J. L., Gayl, C. L., & Wernstedt-Lynch, C. (2022.) *Measuring the quality of early learning environments: A guide to evaluating ideal learning environments for young children.* Washington, DC: Trust for Learning. https://trustforlearning.org/resource/measuring-the-quality-of-early-learning-environments/

[xii] Meek, S., Iruka, I. U., Soto-Boykin, X., Blevins, D., Alexander, B., Cardona, M., & Castro, D. (2022). *Equity is quality, quality is equity: Operationalizing equity in Quality Rating and Improvement Systems.* The Children's Equity Project. Child Care Aware of America. https://cep.asu.edu/resources/Equity-is-Quality-and-Quality-is-Equity

[xiii] Minnesota Department of Education. (2023). *The Successful Learner Equation.* https://education.mn.gov/MDE/dse/early/highqualel/kt/sl/

[xiv] Ghandour, R. M., Hirai, A. H., Moore, K. A., Paschall, K., LaForett D. R., Reddington, E., & Kogan, M. D. (2024). School readiness among United States children: Results from the 2022 National Survey of Children's Health. *Academic Pediatrics.* https://doi.org/10.1016/j.acap.2024.02.013

[xv] Bultinck, E., Silamongkol, T., Lowe, C., Cleveland, J, & Tout, K. (2019). *Provider perceptions of Parent Aware: Minnesota's Quality Rating and Improvement System.* Child Trends. https://www.childtrends.org/publications/provider-perceptions-parent-aware-minnesotas-quality-rating-and-improvement-system

[xvi] Curenton, S. M., Iruka, I. U., Humphries, M., Jensen, B., Durden, T., Rochester, S. E., Sims, J., Whittaker, J. V., & Kinzie, M. B. (2020.) Validity for the Assessing Classroom Sociocultural Equity Scale (ACSES) in early childhood classrooms. *Early Education and Development, 31*(2), 284-303, 10.1080/10409289.2019.1611331

[xvii] Diamond, Z., Hilty, R., Keaton, H., Schaefer, C., & Omonuwa, K. (2024). *Insights on QRIS from six states & a literature review.* Child Trends. https://www.childtrends.org/publications/insights-qris-literature-review

[xviii] Curenton, S. M., Iruka, I. U., Humphries, M., Jensen, B., Durden, T., Rochester, S. E., Sims, J., Whittaker, J. V., & Kinzie, M. B. (2020.) Validity for the Assessing Classroom Sociocultural Equity Scale (ACSES) in early childhood classrooms, *Early Education and Development,* 31:2, 284-303, DOI: 10.1080/10409289.2019.1611331

[xix] Curenton, S. M., Iruka, I. U., Humphries, M., Jensen, B., Durden, T., Rochester, S. E., Sims, J., Whittaker, J. V., & Kinzie, M. B. (2020.) Validity for the Assessing Classroom Sociocultural Equity Scale (ACSES) in early childhood classrooms. *Early Education and Development, 31*(2), 284-303, 10.1080/10409289.2019.1611331

[xx]Stoltz, E. R., Jarquin Tapia, C., & Curenton, S. (2024). *Assessing Classroom Sociocultural Equity Scale Technical Assistance Framework: A pilot partnership with Think Small providers.* Center on the Ecology of Early Development https://static1.squarespace.com/static/6413489745e92a09f1123770/t/65b7ed4aee4b7834374e339e/1706552650643/ACSES-Think+Small+Research+Brief.pdf

[xxi] Curenton, S. M., Iruka, I. U., Humphries, M., Jensen, B., Durden, T., Rochester, S. E., Sims, J., Whittaker, J. V., & Kinzie, M. B. (2020.) Validity for the Assessing Classroom Sociocultural Equity Scale (ACSES) in early childhood classrooms. *Early Education and Development, 31*(2), 284-303, 10.1080/10409289.2019.1611331

[xxii] Curenton, S. M., Iruka, I. U., Humphries, M., Jensen, B., Durden, T., Rochester, S. E., Sims, J., Whittaker, J. V., & Kinzie, M. B. (2020.) Validity for the Assessing Classroom Sociocultural Equity Scale (ACSES) in early childhood classrooms. *Early Education and Development, 31*(2), 284-303, 10.1080/10409289.2019.1611331

[xxiii] Tout, K., Magnuson, K., Lipscomb, S., Karoly, L., Starr, R., Quick H., Early, D., Epstein, D., Joseph, G., Maxwell, K., Roberts, J., Swanson, C., & Wenner, J. (2017). *Validation of the quality ratings used in Quality Rating and Improvement Systems (QRIS): A synthesis of state studies.* OPRE Report #2017-92. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. https://www.acf.hhs.gov/opre/report/validation-quality-ratings-used-quality-rating-and-improvement-systems-qris-synthesis

[xxiv] Brooks, J. L., Gayl, C. L., & Wernstedt-Lynch, C. (2022.) *Measuring the quality of early learning environments: A guide to evaluating ideal learning environments for young children.* Washington, DC: Trust for Learning. https://trustforlearning.org/resource/measuring-the-quality-of-early-learning-environments/

[xxv] Meek, S., Iruka, I. U., Soto-Boykin, X., Blevins, D., Alexander, B., Cardona, M., & Castro, D. (2022). *Equity is quality, quality is equity: Operationalizing equity in Quality Rating and Improvement Systems.* The Children's Equity Project. Child Care Aware of America. https://childandfamilysuccess.asu.edu/sites/default/files/2022-06/QRIS-report-062122.pdf